PROJECT LOCATED IN AND ADJACENT TO THE VILLAGE OF WOODSTOCK

FOR INDEX OF SHEETS, SEE SHEET NO. 2

ADT 16,300 (2007) SPEED LIMIT 55 MPH

# STATE OF ILLINOIS

# **DEPARTMENT OF TRANSPORTATION**

**DIVISION OF HIGHWAYS** 

# **PROPOSED** HIGHWAY PLANS

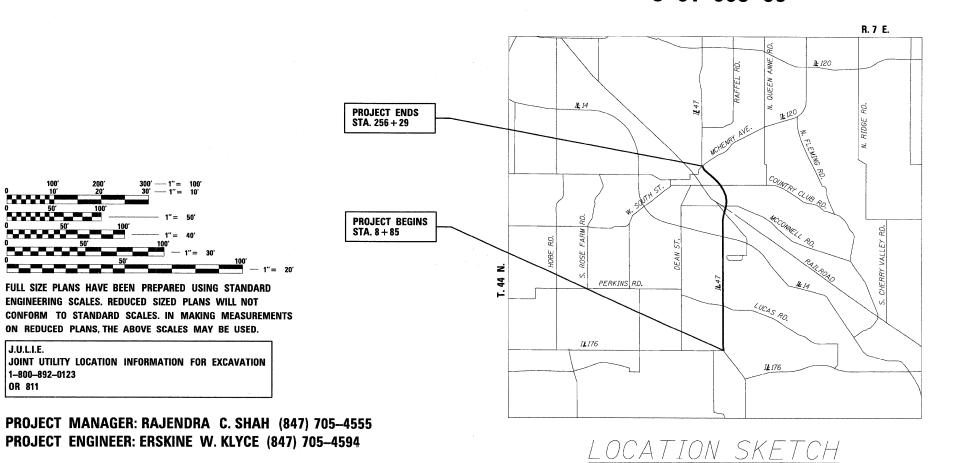
**FAP ROUTE 326 (ILL ROUTE 47)** ILL ROUTE 120 (MCHENRY AVENUE) TO ILL ROUTE 176

SECTION: 105 RS-9

**RESURFACING (3P)** 

MCHENRY COUNTY C-91-603-09

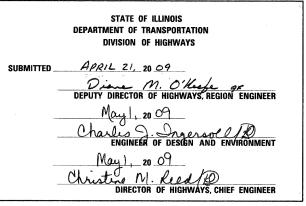
NET AND GROSS LENGTH OF PROJECT = 24,744' = 4.686 MI



105 RS-9 ILLINOIS CONTRACT NO. 60H33

D-91-603-09





## PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS





CONTRACT NO. 60H33

1-800-892-0123

ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION

1 %

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#### INDEX OF SHEETS

SHEE	T NO.	<u>DESCRIPTION</u>	STANDARD	NO. DESCRIPTION
	1	TITLE SHEET	000001 <b>-05</b>	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
	2	INDEX OF SHEETS, STATE STANDANDS, GENERAL NOTES AND MIX SCHEDULE	442201 <b>-03</b>	CLASS C AND D PATCHES
	3-4	SUMMARY OF QUANTITIES	482011 <b>-03</b>	HMA SHLD. STRIPS/SHLDS. WITH RESURFACING OR WIDENING AND RESURFACING PROJECTS
	5	EXISTING AND PROPOSED TYPICAL SECTIONS	606001 <b>-04</b>	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
	6-14	ROADWAY AND PAVEMENT MARKING PLANS	606301 <b>-04</b>	PC CONCRETE ISLANDS AND MEDIANS
	15-21	DETECTOR LOOP PLANS	606306 <b>-03</b>	CORRUGATED PC CONCRETE MEDIANS
	22	DRIVEWAY DETAILS - DISTANCE BETWEEN R.O.W. AND CURB OR EDGE GREATER THAN OR EQUAL TO 15' (4.5m)	642001 <b>-01</b>	SHOULDER RUMBLE STRIPS
	23	DRIVEWAY DETAILS - DISTANCE BETWEEN R.O.W. AND FACE OF CURB IS LESS THAN 15' (4.5m)	701006 <b>-03</b>	OFF-RD OPERATIONS, 2L, 2W, MORE THAN 15' (4.5 M) TO 24" (600MM) FROM PAVEMENT EDGE
	0.4		701011 <b>-02</b> .	OFF-RD MOVING OPERATIONS, 2L, 2W, DAY ONLY
	24 25	DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT	701101 <b>-02</b>	OFF-RD OPERATIONS, MULTILANE, 15' (4.5 M) TO 24" (600MM) FROM PAVEMENT EDGE
	26	CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT	701201 <b>-03</b>	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS LESS THAN 45 MPH
	27	BUTT JOINT AND HMA TAPER DETAILS	701206 <b>-02</b>	LANE CLOSURE, 2L, 2W, NIGHT ONLY, FOR SPEEDS LESS THAN 45 MPH
	28	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS	701301 <b>-03</b>	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
	29	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)	701306 <b>-02</b>	LANE CLOSURE, 2L, 2W, SLOW MOVING OPERATIONS DAY ONLY, FOR SPEEDS LESS THAN 45 MPH
	30	DISTRICT ONE TYPICAL PAVEMENT MARKINGS	701311 <b>-03</b>	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS-DAY ONLY
	31	TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO	701336 <b>-05</b>	LANE CLOSURE, 2L, 2W, WORK AREAS IN SERIES, FOR SPEEDS LESS THAN 45 MPH
	32	REMAIN OPEN TO TRAFFIC)  PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC	701426 <b>-03</b>	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATIONS FOR SPEEDS LESS THAN 45 MPH
		STAGING	701501 <b>-05</b>	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
	33	TRAFFIC CONTROL FOR SHOULDER CLOSURES AND PARTIAL RAMP CLOSURES	70.1606 <b>- 06</b>	URBAN LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
	34	SIGNING FOR FLAGGING OPERATIONS AT WORK ZONE OPENINGS	701701 <b>-06</b>	URBAN LANE CLOSURE, MULTILANE INTERSECTION
	35	ARTERIAL ROAD INFORMATION SIGN	701801 <b>-04</b>	LANE CLOSURE MULTILANE IW OR 2W CROSSWALK OR SIDEWALK CLOSURE
	36	DRIVEWAY ENTRANCE SIGNING	701901 <b>-01</b>	TRAFFIC CONTROL DEVICES
	37	DISTRICT ONE DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING	814001 <b>-02</b>	HANDHOLES
		TOTAL TELEVISION PROPERTY OF THE PROPERTY OF T	886001 <b>-01</b>	DETECTOR LOOP INSTALLATIONS
		STATE STANDARDS	886006 <b>-01</b>	TYPICAL LAYOUTS FOR DETECTION LOOPS

#### PLAN NOTES

BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT 800-892-0123 FOR FIELD LOCATIONS OF BURIED ELECTRIC. TELEPHONE AND GAS FACILITIES. (48 HOUR NOTIFICATION IS REQUIRED)

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES WITHIN THE VILLAGE OF WOODSTOCK,

THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OF FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.

BUTT JOINTS WILL BE INSTALLED AT THE ENDS OF ALL RESURFACING (WHERE RESURFACING MEETS EXISTING PAVEMENT). IN ACCORDANCE WITH THE "BUTT JOINT AND HOT-MIX ASPHALT TAPER DETAILS" SHEETS INCLUDED ON THE PLANS, UNLESS OTHERWISE SPECIFIED.

THE RESIDENT ENGINEER SHALL CONTACT MR. DON CHIARUGI AREA TRAFFIC FIELD ENGINEER AT (847) 741-9857 A MINIMUM OF 2 WEEKS PRIOR TO PLACEMENT OF PERMANENT PAVEMENT MARKING.

10 FEET (3 METERS) TRANSITION SHALL BE USED TO MATCH PROPOSED CURB AND GUTTER TO EXISTING CURB AND GUTTERS IN THE FIELD, UNLESS OTHERWISE SHOWN. THE TRANSITION SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PROPOSED ITEMS OR WORK SPECIFIED.

WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 1½INCHES (40MM) WHERE THE SPEED LIMIT IS 45 MPH (80 KM/H) OR LESS AND I INCH (25MM) WHERE THE SPEED LIMIT IS GREATER THAN 45 MPH (80 KM/H). WITH WRITTEN APPROVAL FROM THE ENGINEER, A MAXIMUM GRADE DIFFERNTIAL OF 3 INCHES (75MM) MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM 1:3 (V:H).

	USER NAME = \$USER\$	DESIGNED - MJY	REVISED -
		DRAWN - ZDA	REVISED -
CONSULTING ENGINEERS 1979 N. MILL ST, SUITE 210	PLOT SCALE = \$SCALE\$	CHECKED - MJY	REVISED -
NAPERVILLE, ILLINOIS 60563 PH: (630) 577-9100	PLOT DATE = \$DATE\$	DATE - 04/22/2009	REVISED -

STATE STANDARDS

	SUMMARY OF QUANTITIES		URBAN	CONSTRUCTIO	ON TYPE CODE	SUMMARY OF QUANTITIES				URBAN	CONSTRUCTION TYPE CODE
CODE NO.	ITEM	UNIT	TOTAL QUANTITIES	1000 100% STATE		С	ODE NO.	ITEM	UNIT	TOTAL QUANTITIES	1000 100% STATE
20201006	GRADING AND SHAPING SHOULDERS	UNIT	212	212		7	0100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	1
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	11.1	// <b>1</b>		7	0100460	TRAFFIC CONTROL AND PROTECTION, STANDARD 701306	L SUM	1	1
40600300	AGGREGATE (PRIME COAT)	TON	. 30	30		7	0100600	TRAFFIC CONTROL AND PROTECTION, STANDARD 701336	L SUM	1	1
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	61	61		7	0102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	1	1
40600895	CONSTRUCTING TEST STRIP	EACH	1	1		7	0102625	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606	L SUM	1	1
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	sa YD	5284	5284		7	0102630	TRAFFIC CONTROL AND PROTECTION, STANDARD 701601	L SUM	1	1
40601005	HOT-MIX ASPHALT REPLACEMENT OVER PATCHES	TON	1685	1685		7	0102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	1
40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	14033	14033		7	0102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1.	1
42001300	PROTECTIVE COAT	sa ya	1381	1381		7	0106800	CHANGEABLE MESSAGE SIGN	CAL MO	4	1
44000155	HOT-MIX ASPHALT SURFACE REMOVAL, 1 1/2"	SQ YD	8675	8675		7	0300100	SHORT-TERM PAVEMENT MARKING	FOOT	5900	5900
44000158	HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"	SQ YD	145261	145261		70	0300210	TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	164 <b>2</b> _	164.2
44001700	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	500	500		70	0300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	82341	82341
44002216	HOT-MIX ASPHALT REMOVAL OVER PATCHES, 4"	SQ YD	7520	7520		70	0300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	3267	3267
44201765	CLASS D PATCHES, TYPE II, 10 INCH	SQ YD	3327	3327		70	0300250	TEMPORARY PAVEMENT MARKING - LINE 8"	FOOT	452	452
44201769	CLASS D PATCHES, TYPE III, 10 INCH	sa ya	3361	3361		70	0300260	TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	4320	4320
44201771	CLASS D PATCHES, TYPE IV, 10 INCH	sa YD	832	832		70	0300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	1683	1683
48102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON	692	692		7	0301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	38709	38709
55039700	STORM SEWERS TO BE CLEANED	F00T	1240	1240		* 7	8000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	164 <b>2</b>	164. <b>2</b>
60250200	CATCH BASINS TO BE ADJUSTED	EACH	8	8		¥ 78	8000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	82341	82341
60255500	MANHOLES TO BE ADJUSTED	EACH	12	12		¥ 78	8000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	<i>3267</i>	3267
60260100	INLETS TO BE ADJUSTED	EACH	14	14		× 78	8000500	THERMOPLASTIC PAVEMENT MARKING - LINE 8"	FOOT	452	452
60300105	FRAMES AND GRATES TO BE ADJUSTED	EACH	18	18		* 78	8000600	IHERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	4320	4320
60300310	FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	EACH	71	71		* 78	8000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	1683	1683
67000400	ENGINEER'S FIELD OFFICE, TYPE A	AL MO	6	6		* 7	8100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	1581	1581
67100100	MOBILIZATION	SUM	1	1		78300200 RA		RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	1581	1581
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									* Specia	alty Hem	25

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

IL ROUTE 47 FROM IL ROUTE 176 TO IL ROUTE 120

SCALE: NONE SHEET NO. 3 OF 37 SHEETS STA. 8+85 TO STA. 256+29

F.A.P. SECTION COUNTY SHEETS NO.

326 105 RS-9 MCHENRY 37 3

C-91-603-09 CONTRACT NO. 60H33

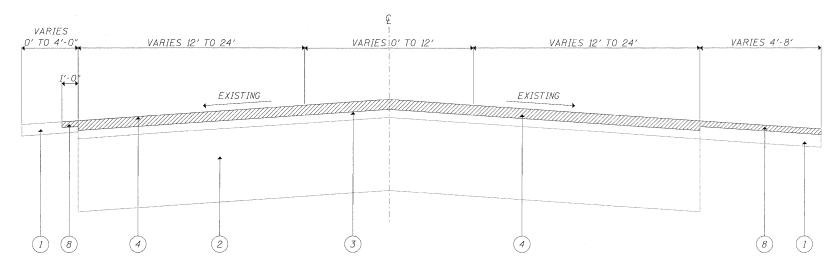
FED. ROAD DIST, NO. ILLINOIS FED. AID PROJECT

	SUMMARY OF QUANTITIES		URBAN	CONSTRUCTIO	ON TYPE CODE			SUMMARY	OF QUANTITIE	īs		CONSTRUCTION TYPE CODE
CODE NO.	ITEM .	UNIT	TOTAL QUANTITIES	1000 100% STATE	TOTAL COST	со	DDE NO.	ITEM	I		UNIT TOTAL QUANTITIES	1000 100% STATE TOTAL COST
<b>*</b> 87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1572	1572								
<b>4</b> 88500100	INDUCTIVE LOOP DETECTOR	EACH	10	10								
<b>*</b> 88600100	DETECTOR LOOP, TYPE I	FOOT	1148	1148								
¥ 88600600	DETECTOR LOOP REPLACEMENT	FOOT	4941	4941								
X0322256	TEMPORARY INFORMATION SIGNING	SQ FT	160	160								
X4067107	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	TON	6101	6101								
44004600	SIDEWALK REMOVAL AND REPLACEMENT	SQ FT	350	350								
Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	5	5								
Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1	1								
	* Specialty Items											
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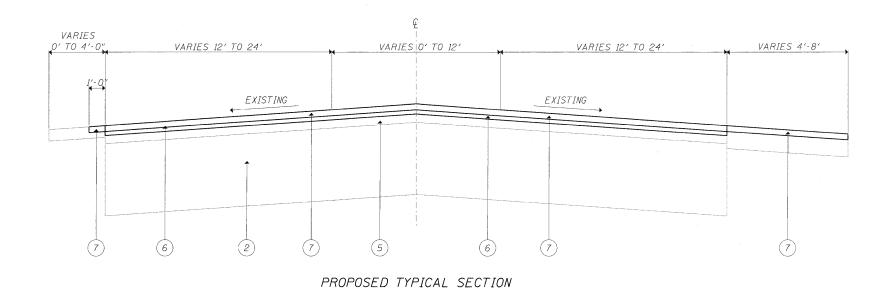
	USER NAME = \$USER\$	DESIGNED - MJY	
	•	DRAWN - RJG	REVISED -
CONSULTING ENGINEERS 1979 N. MILL ST. SUITE 210	PLOT SCALE = \$SCALE\$	CHECKED - MJY	REVISED -
NAPERVILLE, ILLINOIS 60563 PH: (630) 577-9100	PLOT DATE = \$DATE\$	DATE - 04/22/2009	REVISED -

				SI	JMR	MAI	RY OF	Qυ	anti	LIES					
IL	ROUTE	47	FF	ROM	IL	ا ر.	ROUTE	176	S TO	IL	F	ROUT	ΓΕ	120	
SCALE:	NONE	SHEE	ET N	٧0.	4 OF	37	SHEETS		STA.	8+85	TO	STA.	25	6+29	

F.A.P. RTE.	SEC.	TION		COUNTY	TOTAL SHEETS	SHEET NO.
326	105 RS-	9		MCHENRY	37	4
	C-91-603	-09	CONTRACT	NO. 6	60H33	
FED. RO	DAD DIST. NO.	ILLINOIS	FED. AII	PROJECT		*****



EXISTING TYPICAL SECTION





## PROPOSED TYPICAL SECTION W/ CURB AND GUTTERS

## <u>LEGEND</u>

- 1) EXISTING BITUMINOUS SHOULDER
- 2) EXISTING P.C. CONCRETE PAVEMENT +/- 9"
- (3) EXISTING HMA SURFACE COURSE +/- 4\*
- (3A) EXISTING CONCRETE CURB AND GUTTER
- (4) PROPOSED HMA SURFACE REMOVAL (21/4")
- 5 HMA MATERIAL AFTER MILLING, +/- 2"
- 6 PROPOSED POLYMERIZED LEVELING BINDER (MACHINE METHOD) IL-4.75. N50 (3/4")
- 7 PROPOSED HMA SURFACE COURSE, MIX "D". N70 (1/2")
- (8) PROPOSED HMA SURFACE REMOVAL ( $I_2^{\prime}$ )
- 9 PROPOSED CONCREATE CURB AND GUTTER

HOT-MIX ASPHALT MIXTURE REQUIREMENTS										
MIXTURE TYPE	AC/PG	DESIGN AIR VOIDS								
HMA SURFACE COURSE, MIX D. N7O. (IL-9.5 mm)	PG 64-22	4% © 70 GYR								
POLYMERIZED LEVELING BINDER (MACHINE METHOD). IL-4.75, N50	SBS-SBR PG 76-28/22	4% © 50 GYR								
CLASS D PATCHES (HMA BINDER IL 19 mm)	PG 64-22*	4% © 70 GYR								
HMA REPLACEMENT OVER PATCHES (HMA BINDER IL 19 mm)	PG 64-22*	4% © 70 GYR								
DRIVEWAY PAVEMENT REMOVAL AND REPLACEMENT	PG 64-22*	4% © 50 GYR								

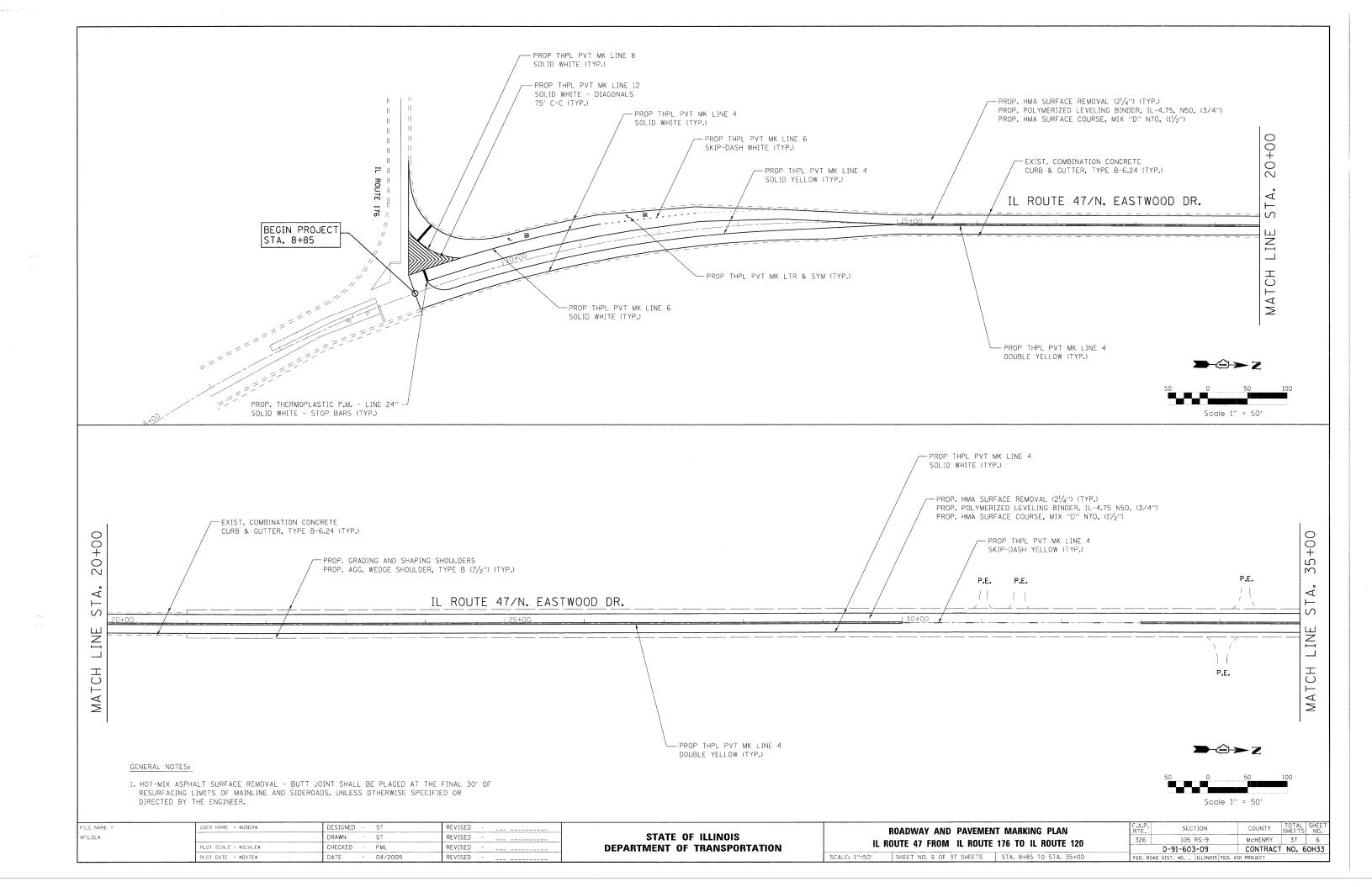
#### NOTE:

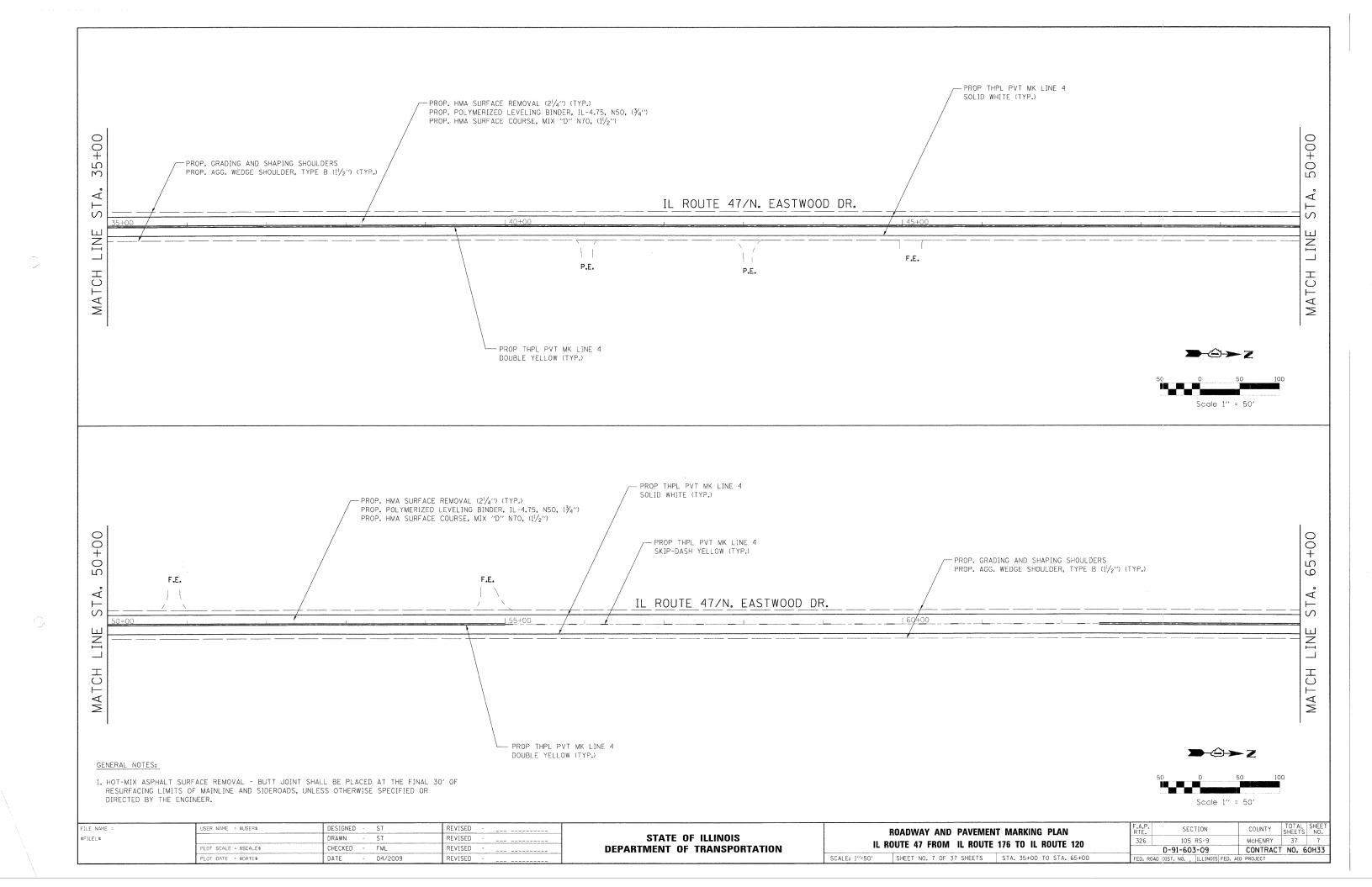
THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE COURSE MIXTURES IS 112 LSB/SOYD/IN.
\*\*WHEN RAP EXCEEDS 20%. THE NEW ASPHALT BINDER IN THE MIX SHALL BE PG 58-22

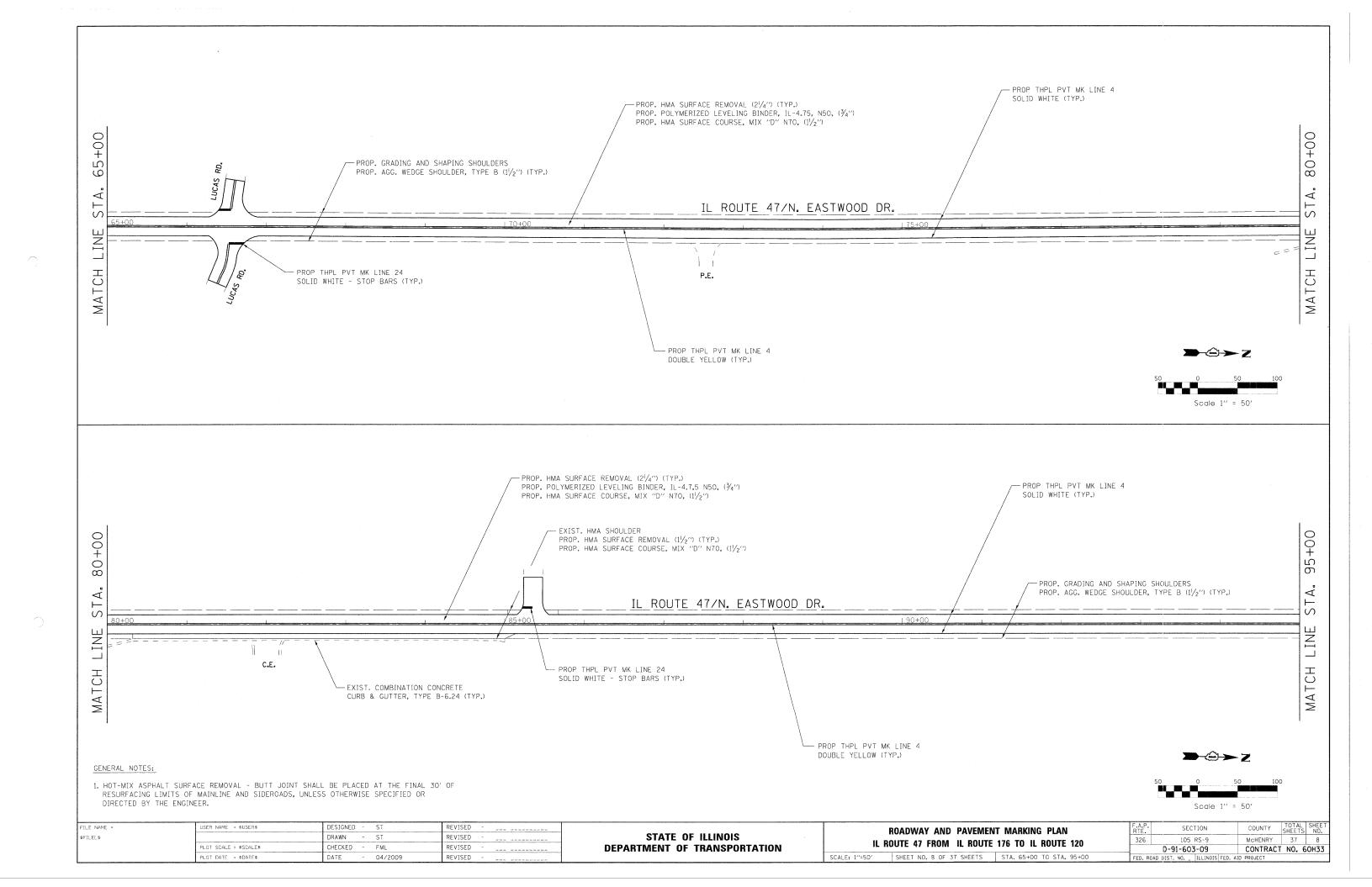
THE CONTRACTOR SHALL PATCH FIRST BEFORE MILLING

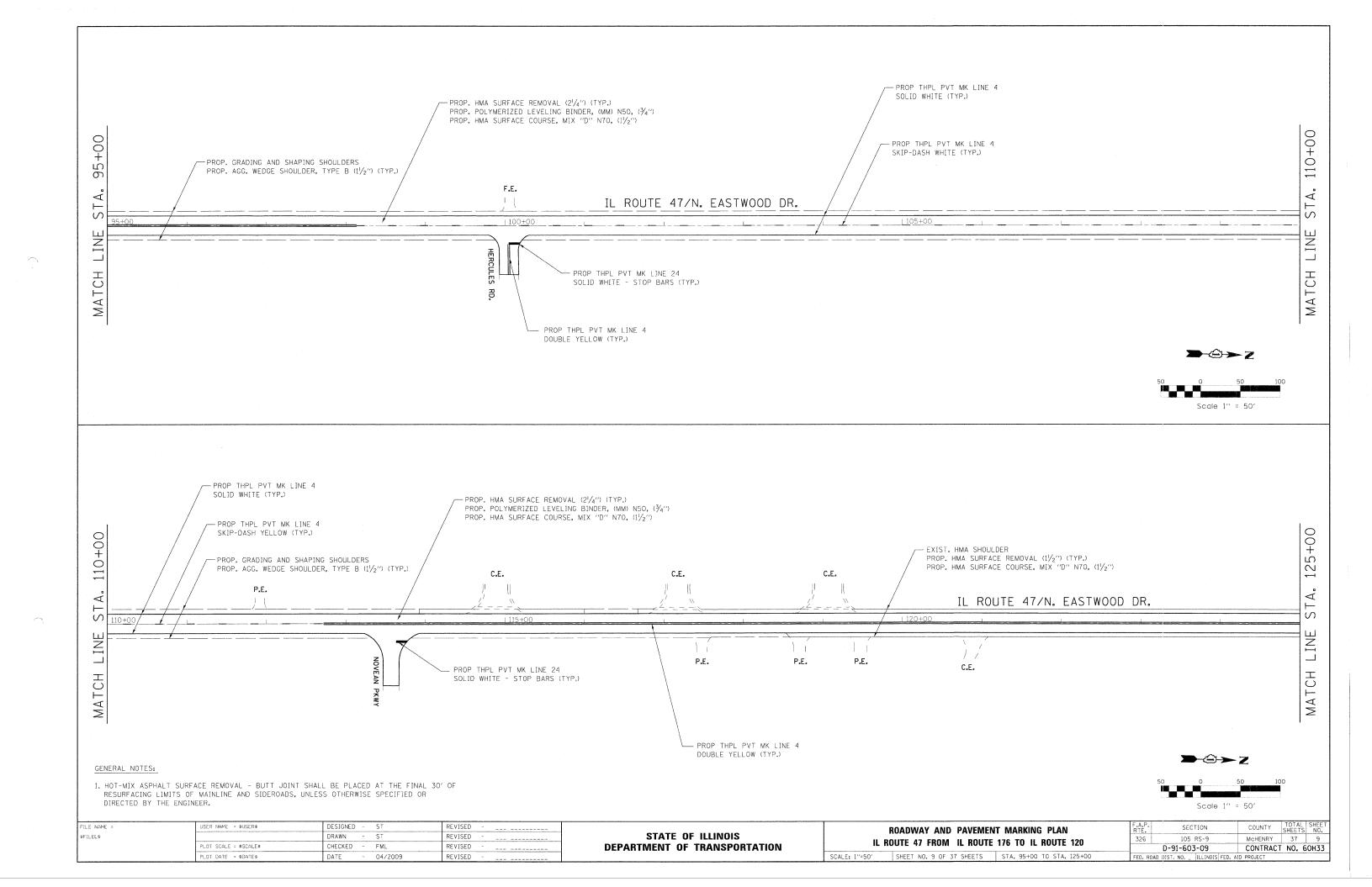
SHOULDER WIDENING GREATER THAN 4' AT VARIOUS LOCATIONS WITHIN THE LIMITS OF IMPROVEMENT

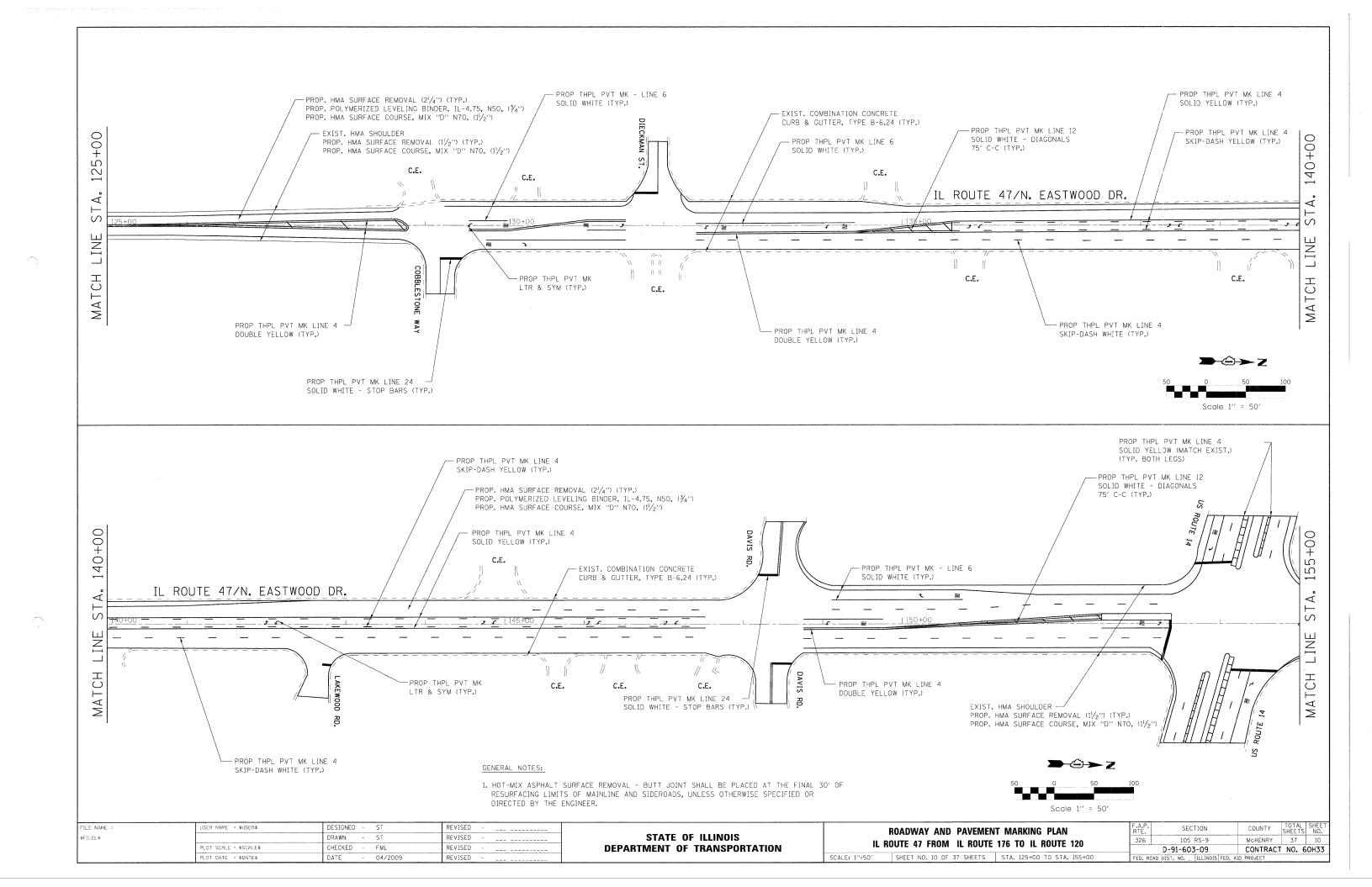
CONSULTING ENGINEERS 1560 WALL ST, SUITE 222	DESIGNED - MJY DRAWN - ZDA CHECKED - MJY	REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	IL	TYPICAL SEC ROUTE 47 FROM IL ROUTE	TIONS 176 TO IL ROUTE 120	F.A.P. RTE. 326	SECTION 105 RS-9 D-91-603-09	COUNTY S  MCHENRY  CONTRACT	TO SHE
NAPERVILLE, ILLINOIS 60563 PH: (630) 577-9100	 DATE - 04/15/2009	REVISED -		SCALE: NONE	SHEET NO. 5 OF 37 SHEETS			. AID PROJECT		

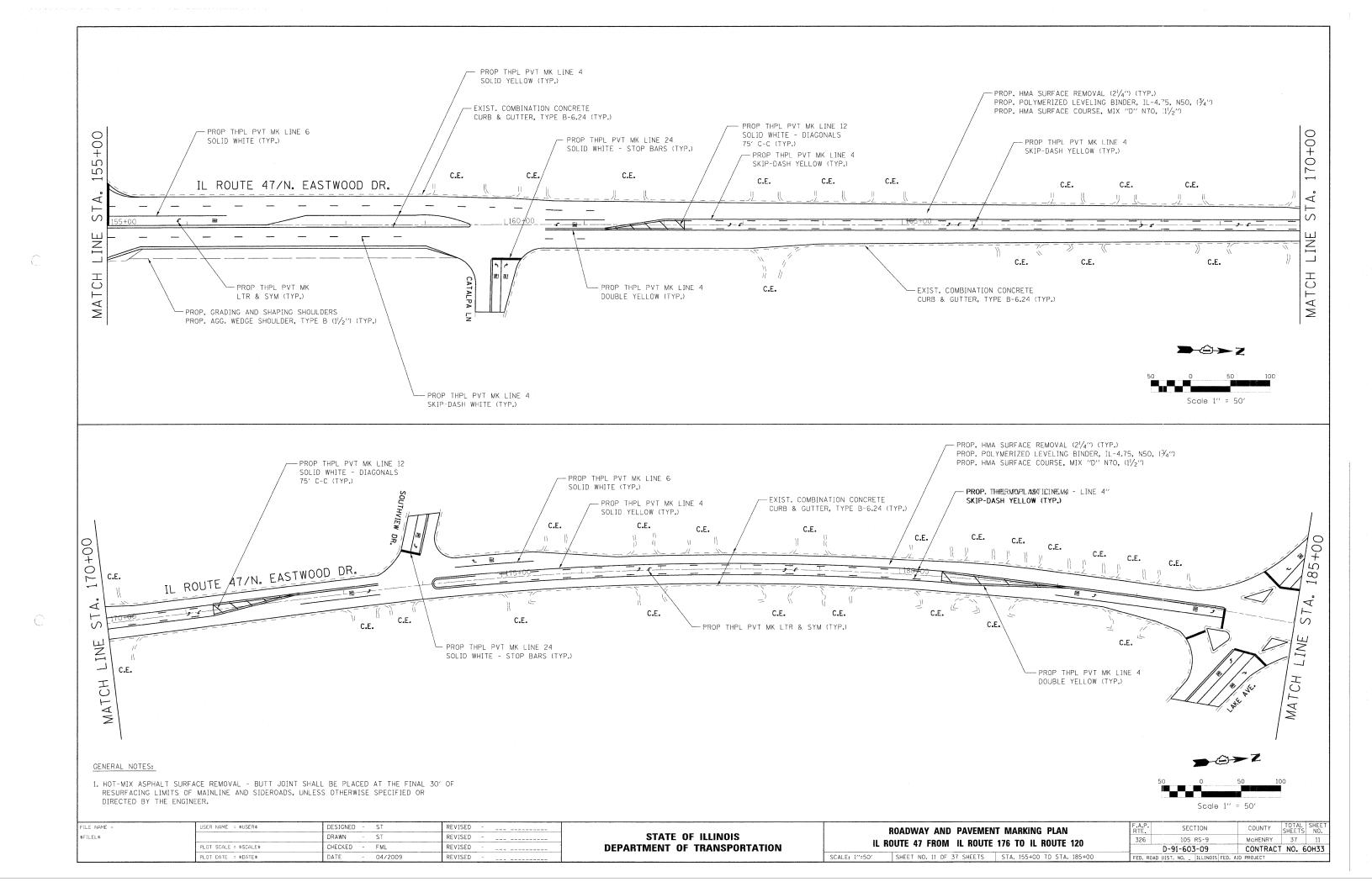


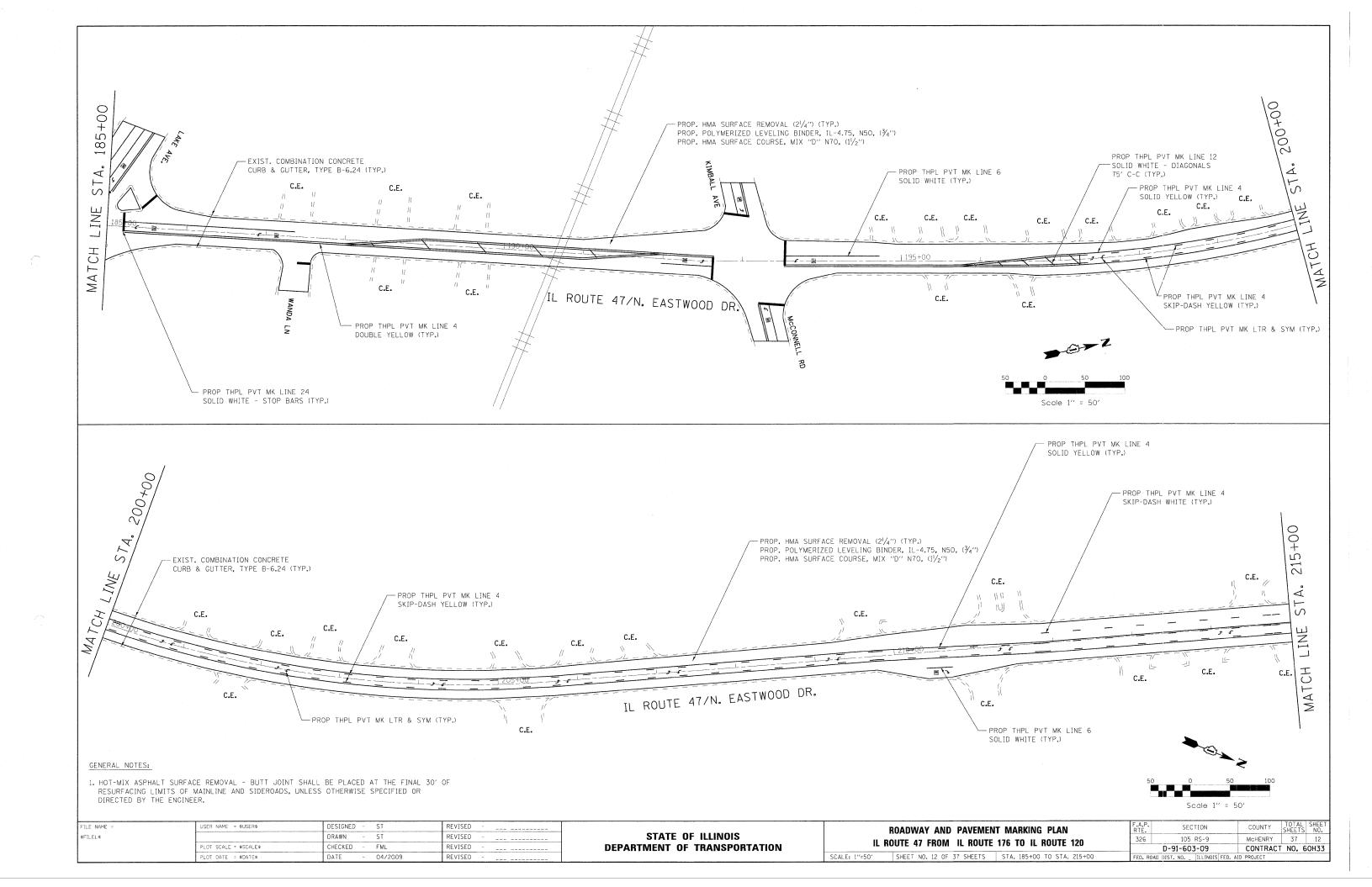


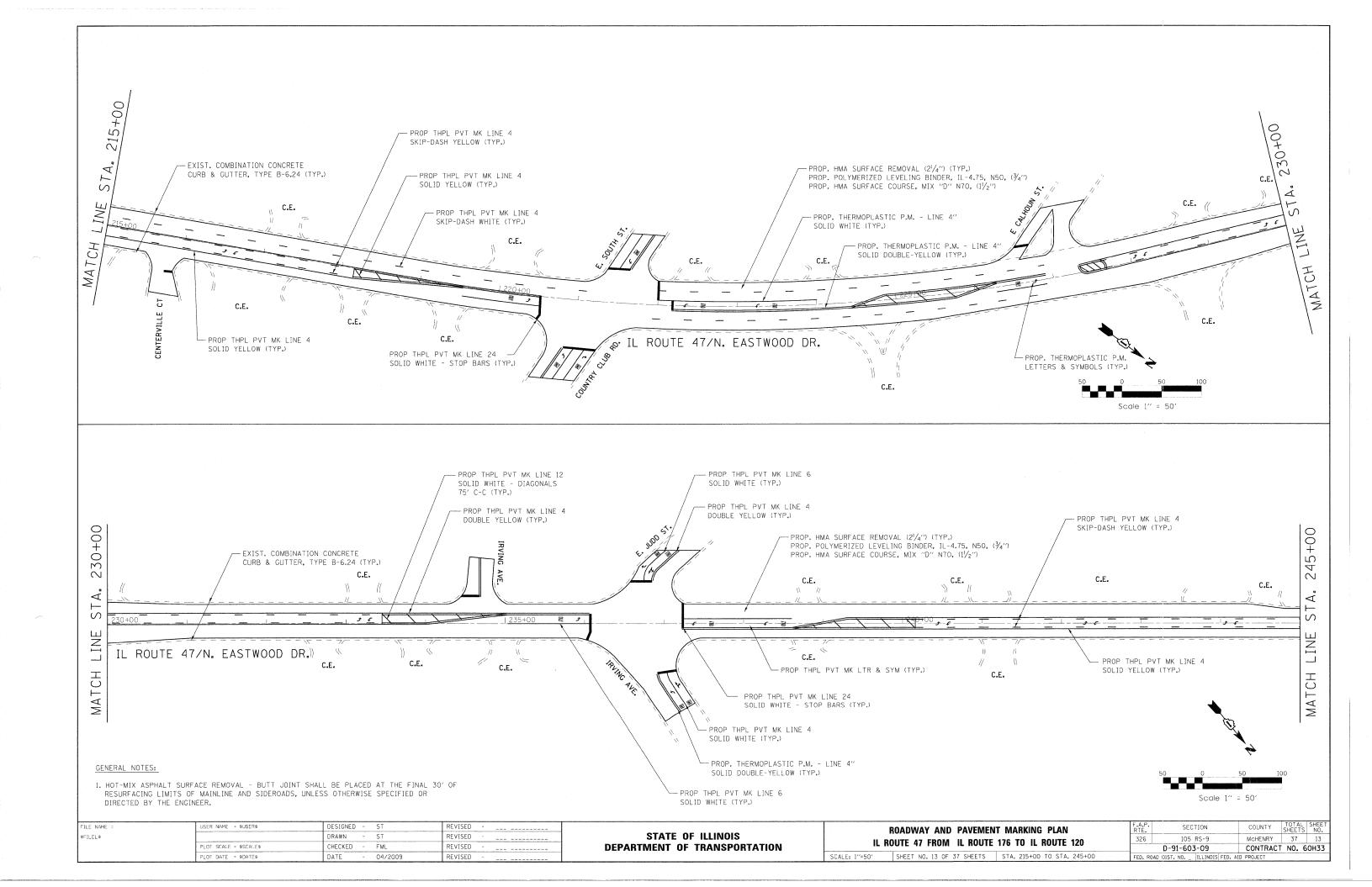


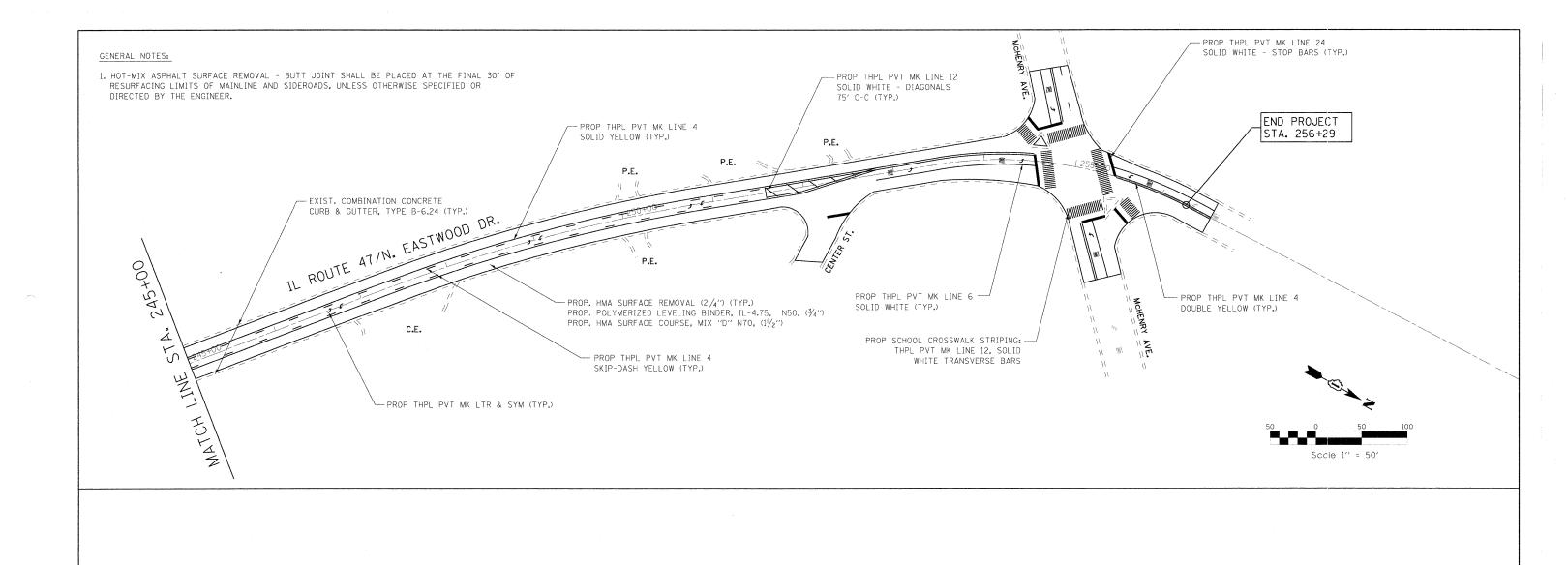








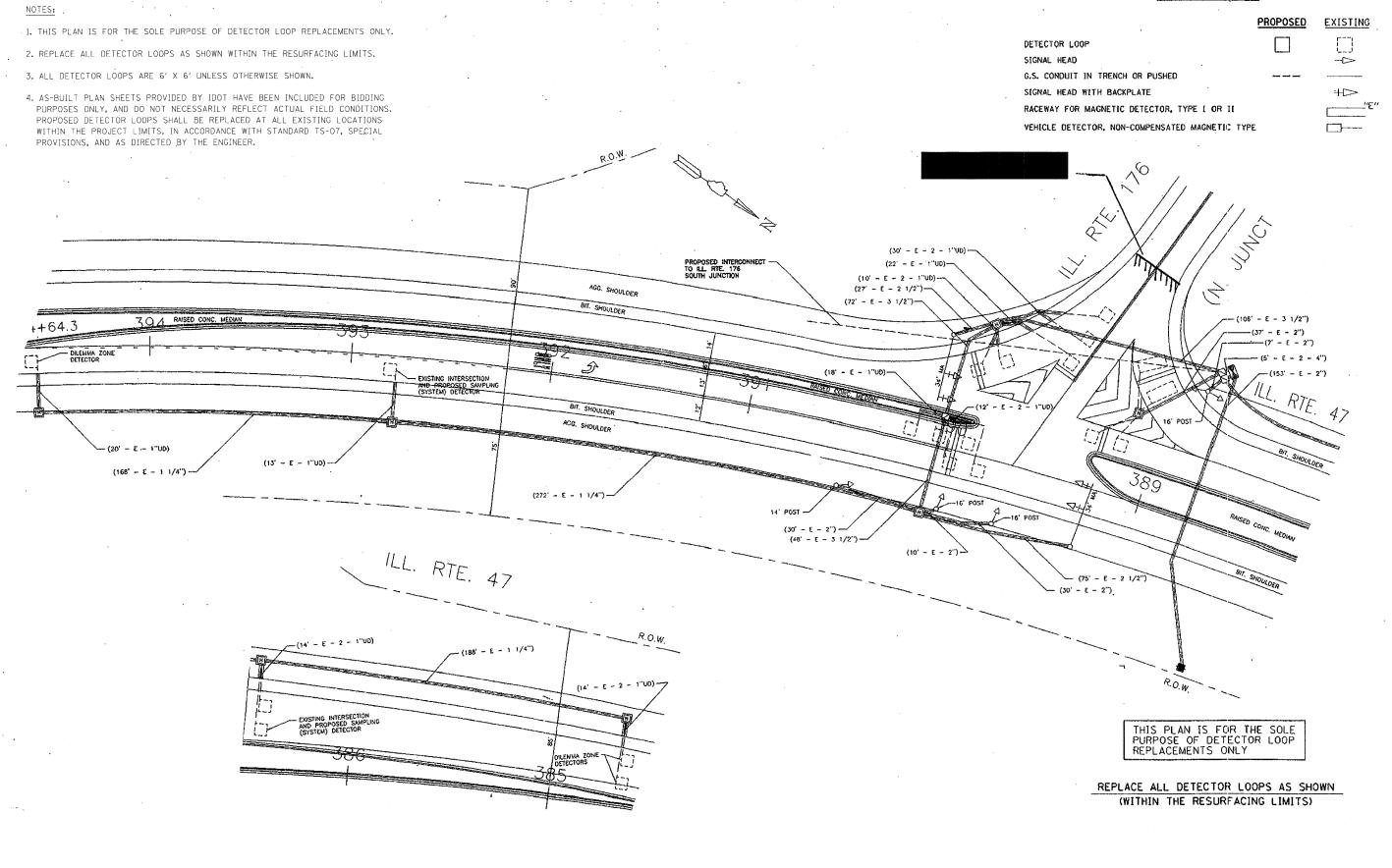




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	PLOT SCALE = \$SCALE\$	CHECKED -	FML	REVISED -	****
	PLOT DATE = \$DATE\$	DATE -	04/2009	REVISED -	

STATI	E OI	F ILLINOIS
DEPARTMENT	OF	TRANSPORTATION

ROADWAY AND PAVEMENT MARKING PLAN	F.A.P. RTE.	SECTION	COUNTY TOT		SHEET NO.
IL ROUTE 47 FROM IL ROUTE 176 TO IL ROUTE 120	326	105 RS-9	McHENRY	37	14
IL HOULE 47 I HOW IL HOUSE 170 ID IL HOUSE 120	D-91-603-09 CONTRACT NO. 60H3				
SCALE: 1"=50"   SHEET NO. 14 OF 37 SHEETS   STA. 245+00 TO STA. 256+29	FED. RO	DAD DIST. NO ILLINOIS FED. A	D PROJECT		



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\$FILEL\$		DRAWN -		REVISED	
	PLOT SCALE = \$SCALE\$	CHECKED -	70 no no	REVISED	
	PLOT DATE = \$DATE\$	DATE -	4/2009	REVISED	w.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE: NONE

DETECTOR LOOP PLAN - IL ROUTE 176 (NORTH JCT.)	F.A.P. RTE.	SECTION			
IL ROUTE 47 FROM IL ROUTE 176 TO IL ROUTE 120	326	105 RS-9			
IL NOOTE 47 I NOW! IL NOOTE 170 TO IL NOOTE 120		[)-91-603-09			
WE SHEET NO. 15 OF 37 SHEETS   STA. 8+85 TO STA. 256+29	FED. ROAD	DIST. NO. ILLINOIS			

CONTRACT NO. 60H33

105 RS-9

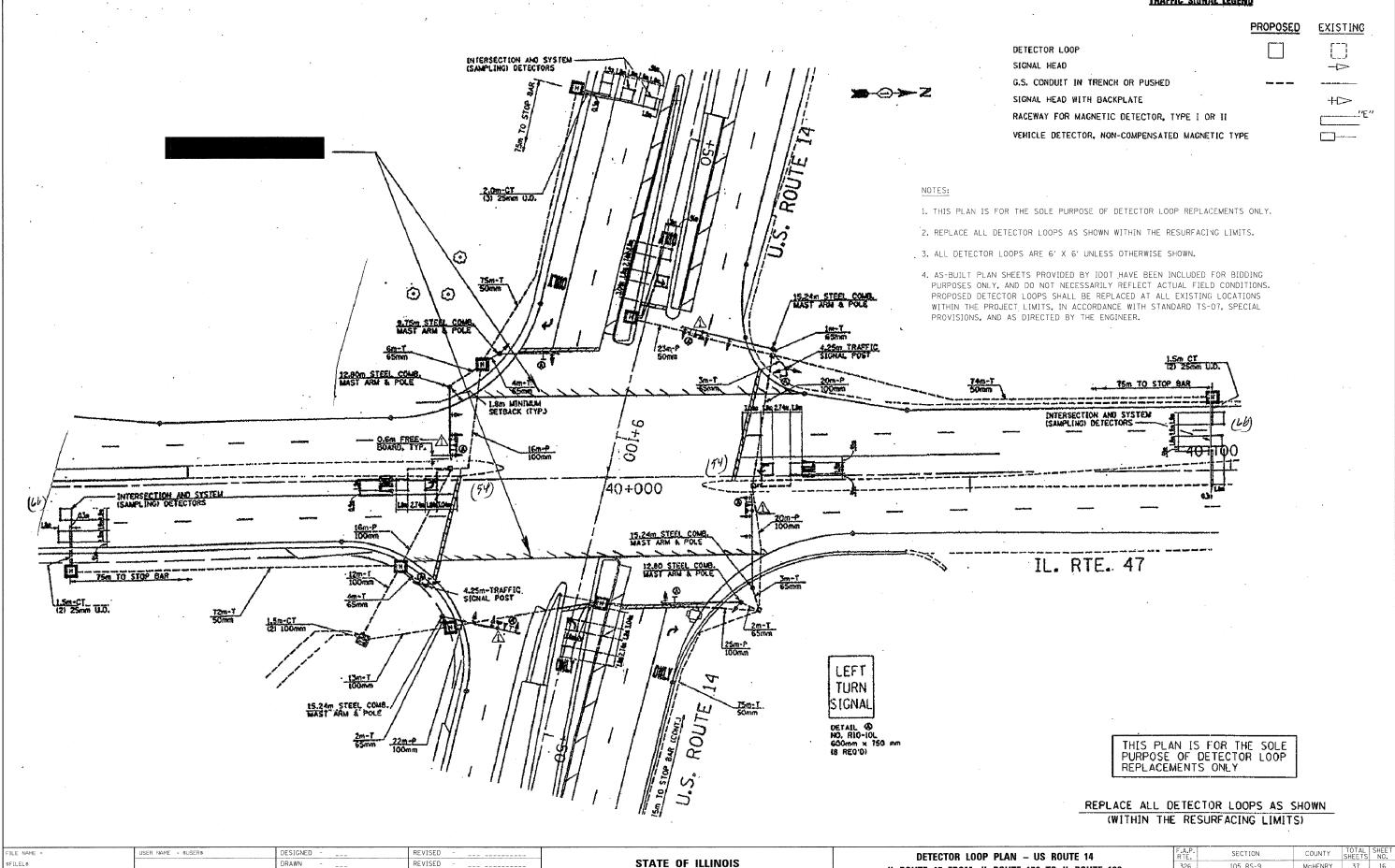
[)-91-603-09

IL ROUTE 47 FROM IL ROUTE 176 TO IL ROUTE 120

SCALE: NONE SHEET NO. 16 OF 37 SHEETS STA. 8+85 TO STA. 256+29

McHENRY

CONTRACT NO. 60H33



**DEPARTMENT OF TRANSPORTATION** 

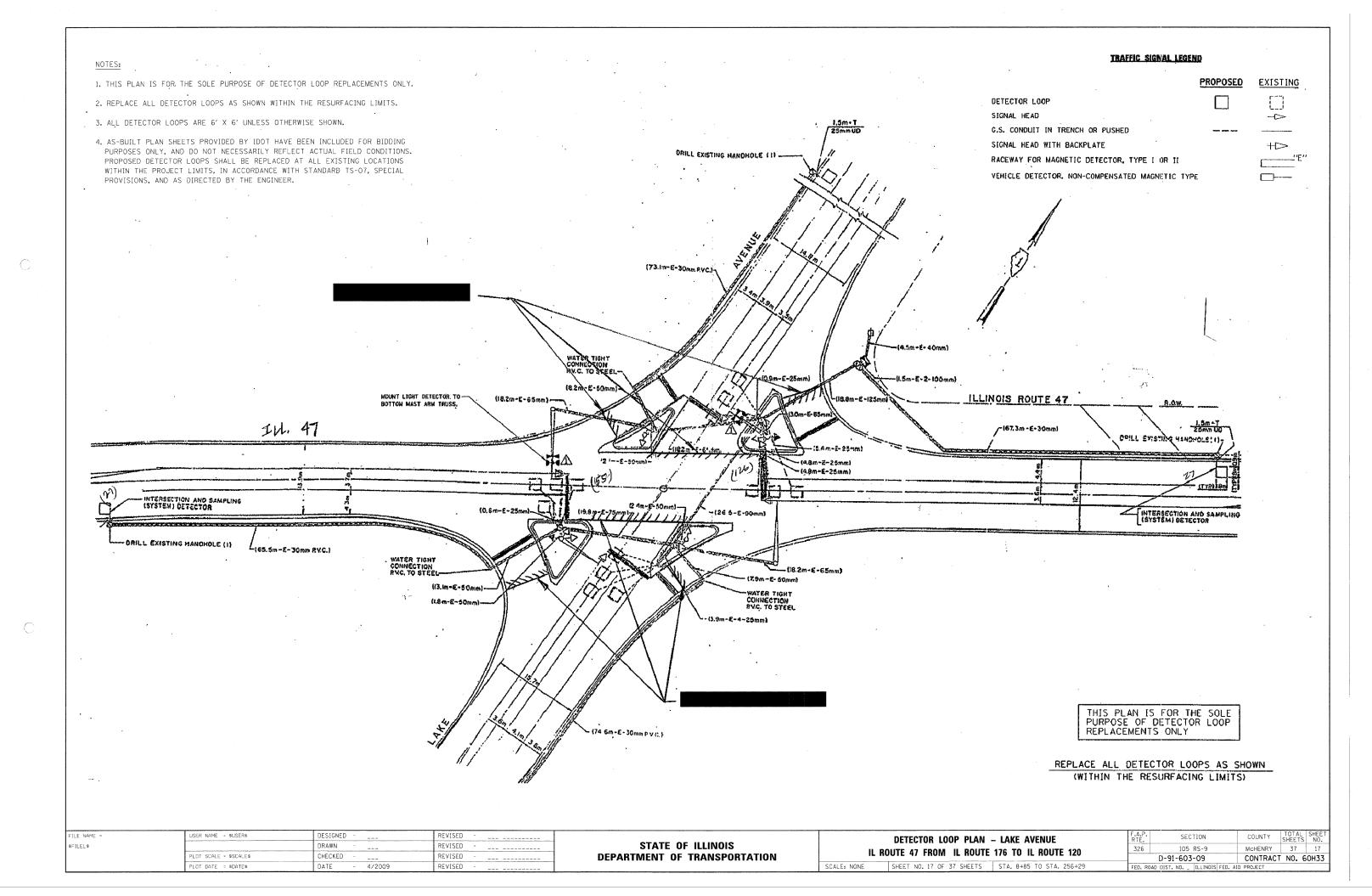
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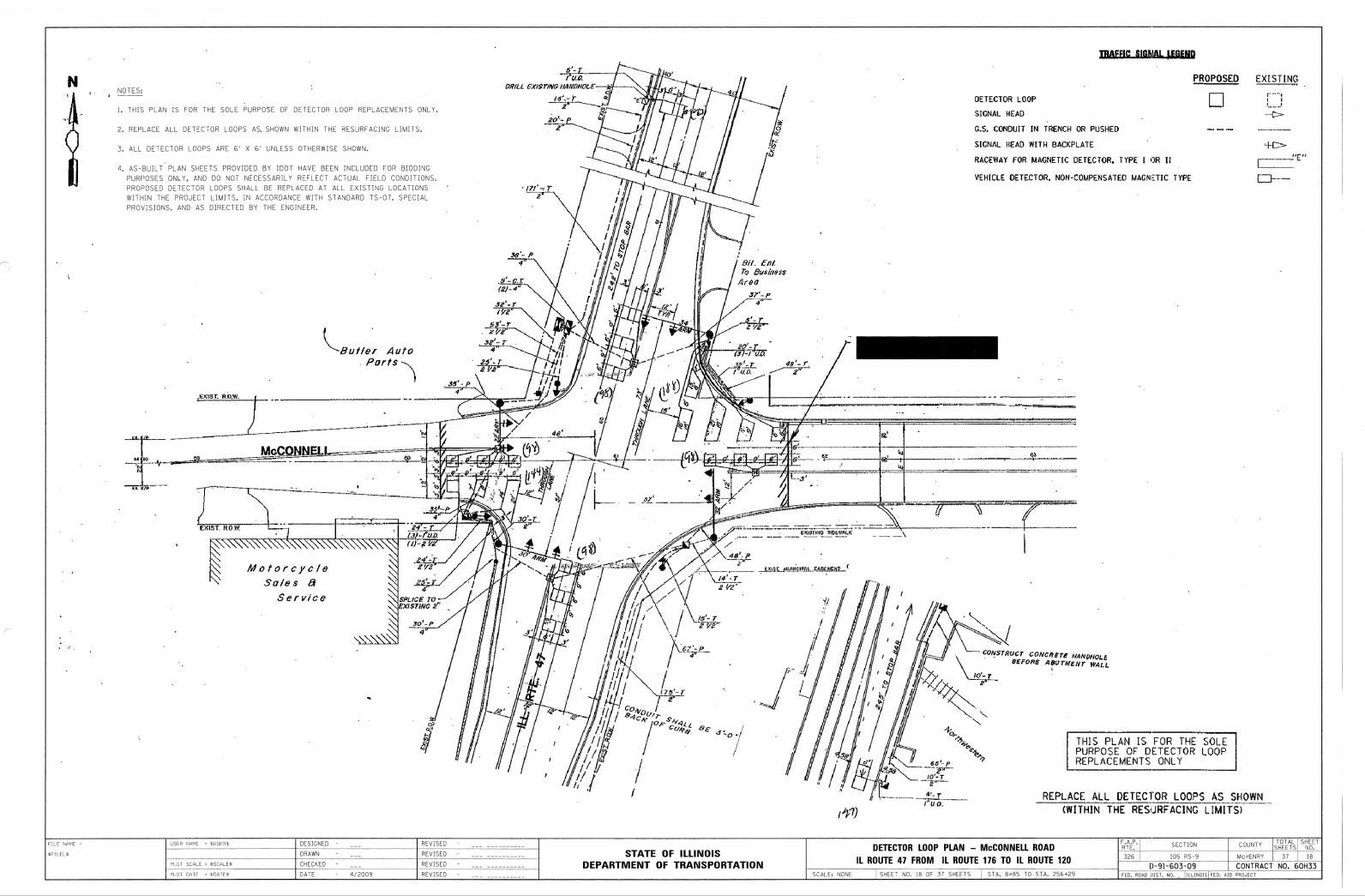
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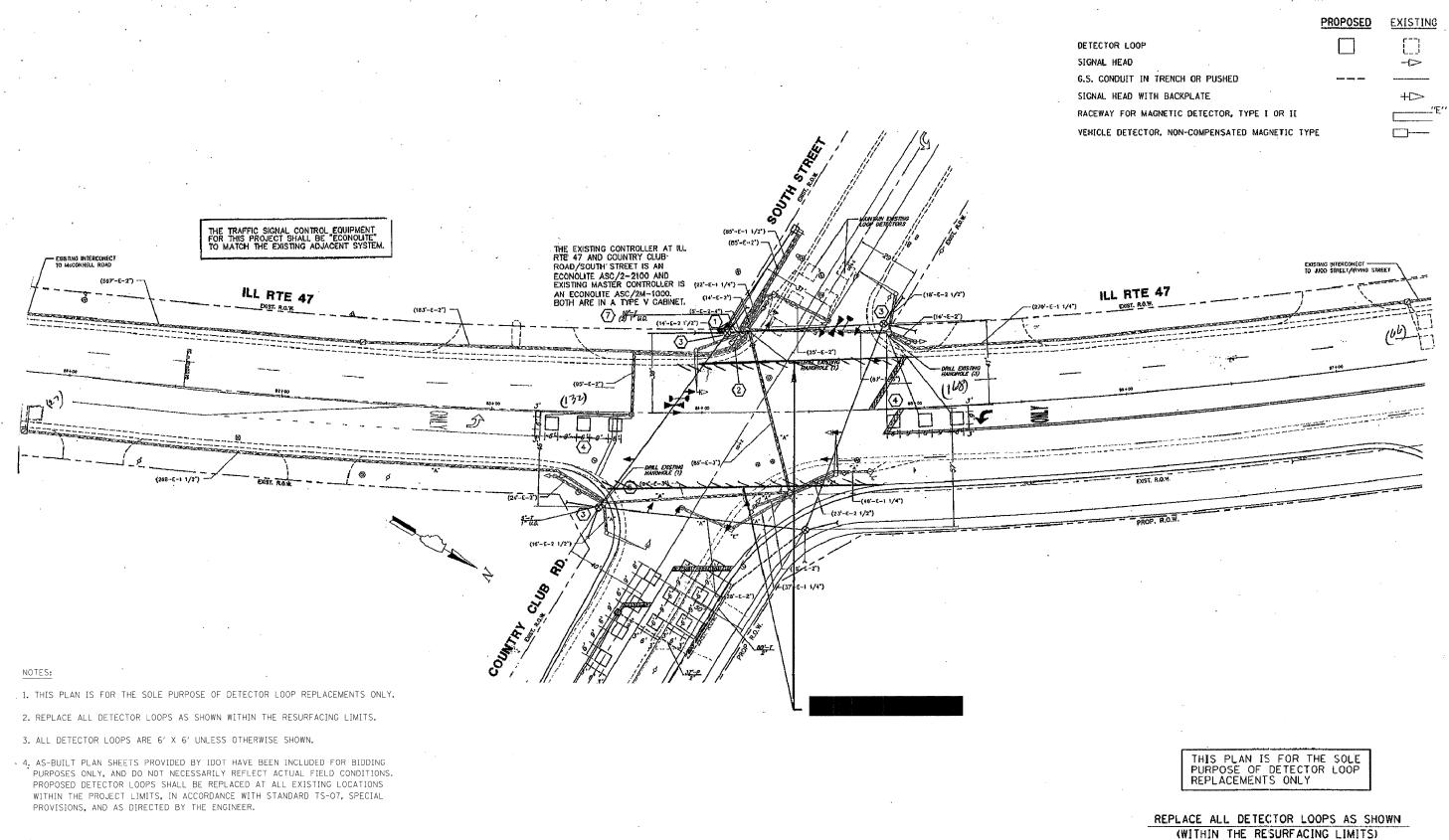
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DATE

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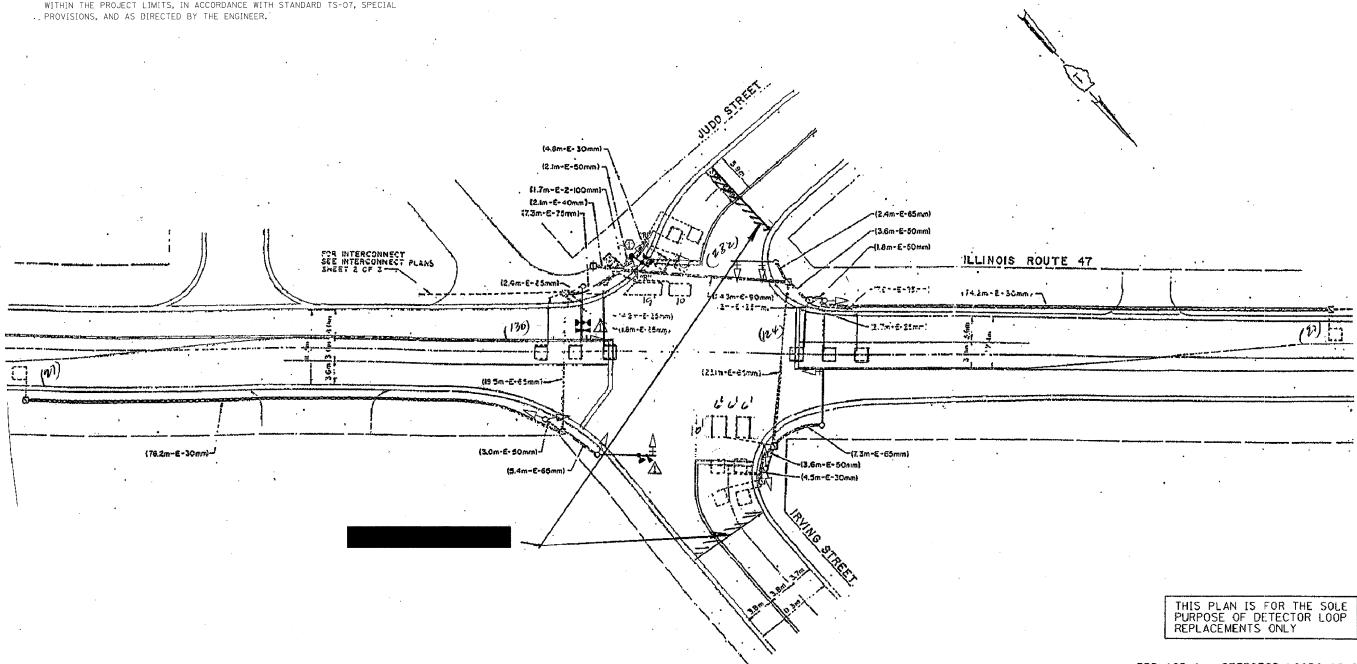


FILE NAME =	USER NAME = \$USER\$	DESIGNED	REVISED -		DETECTOR LOOP PLAN - SOUTH STREET & COUNTRY CLUB ROAD	F.A.P. SECTION	COUNTY TOTAL SHEET
\$FILEL\$		DRAWN	REVISED -	STATE OF ILLINOIS	IL ROUTE 47 FROM IL ROUTE 176 TO IL ROUTE 120	326 105 RS-9	MCHENRY 37 19
	PLOT SCALE = \$SCALE\$	CHECKED	REVISED	DEPARTMENT OF TRANSPORTATION	IL NOUTE 47 FROWN IL NOUTE 170 TO IL NOUTE 120	[)-91-603-09	CONTRACT NO. 60H33
	PLOT DATE = \$DATE\$	DATE - 4/2009	REVISED		SCALE: NONE   SHEET NO. 19 OF 37 SHEETS   STA. 8+85 TO STA. 256+29	FED. ROAD DIST. NO ILLINOIS FED.	AID PROJECT

# PROPOSED EXISTING DETECTOR LOOP SIGNAL HEAD G.S. CONDUIT IN TRENCH OR PUSHED SIGNAL HEAD WITH BACKPLATE RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR II VEHICLE DETECTOR, NON-COMPENSATED MAGNETIC TYPE

# 1. THIS PLAN IS FOR THE SOLE PURPOSE OF DETECTOR LOOP REPLACEMENTS ONLY.

- 2. REPLACE ALL DETECTOR LOOPS AS SHOWN WITHIN THE RESURFACING LIMITS.
- 3. ALL DETECTOR LOOPS ARE 6' X 6' UNLESS OTHERWISE SHOWN.
- 4. AS-BUILT PLAN SHEETS PROVIDED BY IDOT HAVE BEEN INCLUDED FOR BIDDING PURPOSES ONLY, AND DO NOT NECESSARILY REFLECT ACTUAL FIELD CONDITIONS. PROPOSED DETECTOR LOOPS SHALL BE REPLACED AT ALL EXISTING LOCATIONS WITHIN THE PROJECT LIMITS, IN ACCORDANCE WITH STANDARD TS-O7, SPECIAL PROVISIONS AND AS DIFFERED BY THE ENGINEER.



REPLACE ALL DETECTOR LOOPS AS SHOWN
(WITHIN THE RESURFACING LIMITS)

FILE NAME =	USER NAME = \$USER\$	DESIGNED	REVISED -
\$FILEL\$		DRAWN	REVISED -
	PLOT SCALE = \$SCALE\$	CHECKED	REVISED -
	PLOT DATE = \$DATE\$	DATE - 4/2009	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETECTOR	LOOP	PLAN	- JUDD S	TREET &	IRVING	STREET
IL ROU	JTE 47	FROM	IL ROUTE	176 TO II	L ROUTE	120
NIC G	SUCCE NO	20 OF	37 CHEETS	STA RARE	TO STA	256 ± 29

F.A.P. RTE.	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
326	105 RS-9	T	McHENRY	37	20
	[)-91-603-09		CONTRACT	NO. 6	он33
FED. RO	AD DIST. NO ILLINOIS FED.	AIE	PROJECT		

SECTION

D-91-603-09

DETECTOR LOOP PLAN - IL ROUTE 120

IL ROUTE 47 FROM IL ROUTE 176 TO IL ROUTE 120

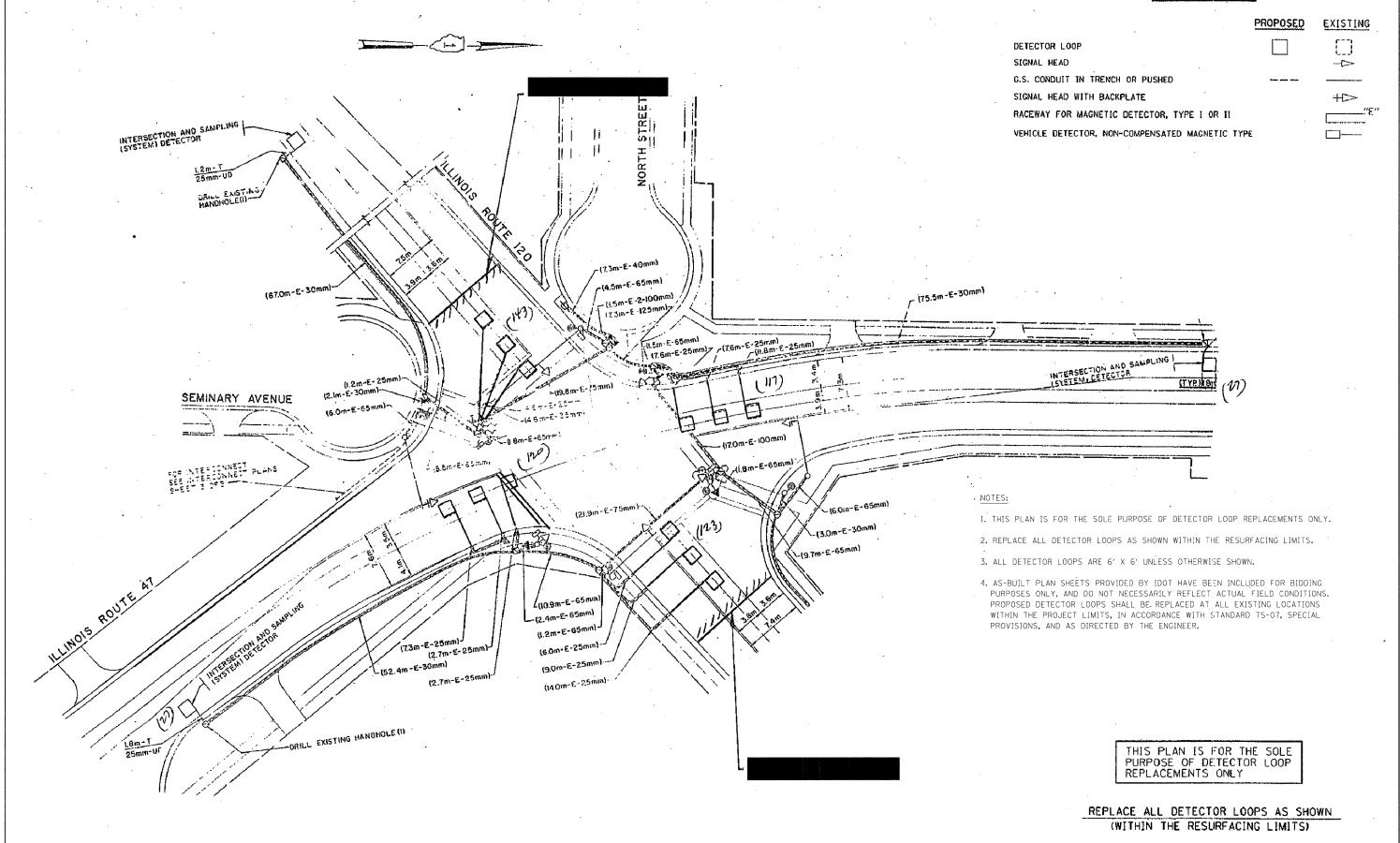
SHEET NO. 21 OF 37 SHEETS STA. 8+85 TO STA. 256+29

SCALE: NONE

COUNTY TOTAL SHEET NO.

CONTRACT NO. 60H33

McHENRY



STATE OF ILLINOIS

**DEPARTMENT OF TRANSPORTATION** 

JSER NAME = \$USER\$

PLOT SCALE = \$SCALE\$

\$FILEL\$

DESIGNED

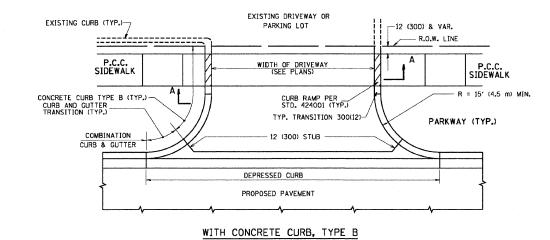
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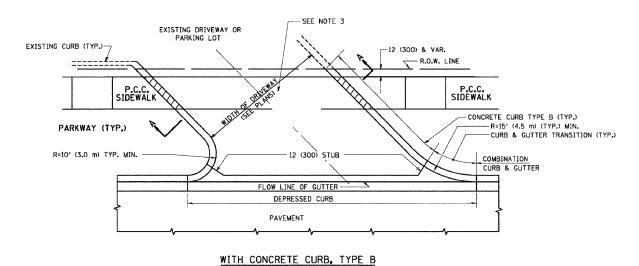
DATE

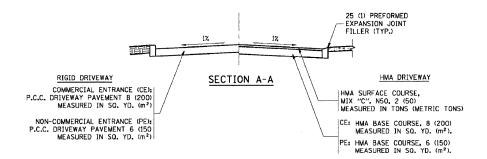
CHECKED

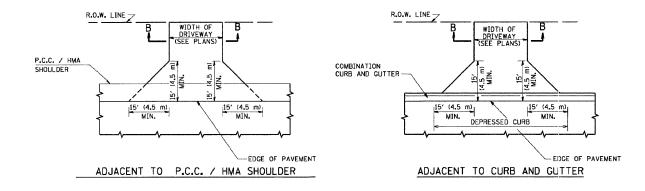
REVISED

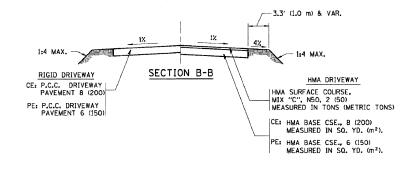
REVISED











#### HMA SURFACE COURSE, MIX "C", N50, 2 (50) MEASURED IN TONS (METRIC TONS)

MEASURED IN TONS (METRIC TONS)

AGGRECATE BASE CSE., TYPE B. 8 (200)

MEASURED IN SO. YD. (m²).

RURAL FIELD ENTRANCE (FE)

## GENERAL NOTES:

DRIVEWAY SLOPES, LOCATIONS, & GEOMETRIC LAYOUT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "HANDBOOK FOR POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS". FOR FURTHER LAYOUT REQUIREMENTS, REFER TO ILLUSTRATIONS IN THE PERMIT HANDBOOK. DRIVEWAYS SHALL BE REPLACED IN KIND, UNLESS OTHERWISE NOTED ON THE PLANS.

COMMERCIAL DRIVEWAYS SHALL BE CONSTRUCTED WITH CONCRETE CURB, TYPE B RETURNS EXCEPT WHEN THE SIDEWALK EDGE IS 4 FEET 1.2 METERS OR LESS FROM THE BACK OF CURB, CONSTRUCT A FLARE DRIVEWAY WITHOUT CURB.

THE RESIDENT ENGINEER SHALL CONTACT THE TRAFFIC PERMIT OFFICE AT 847/ 705-4131 FOR ANY OUESTIONS ON DRIVEWAYS SHOWN IN THE PLANS; SPECIFICALLY IN REFERENCE TO ADDITIONAL AND/OR RELOCATION/REMOVAL OF A DRIVEWAY.

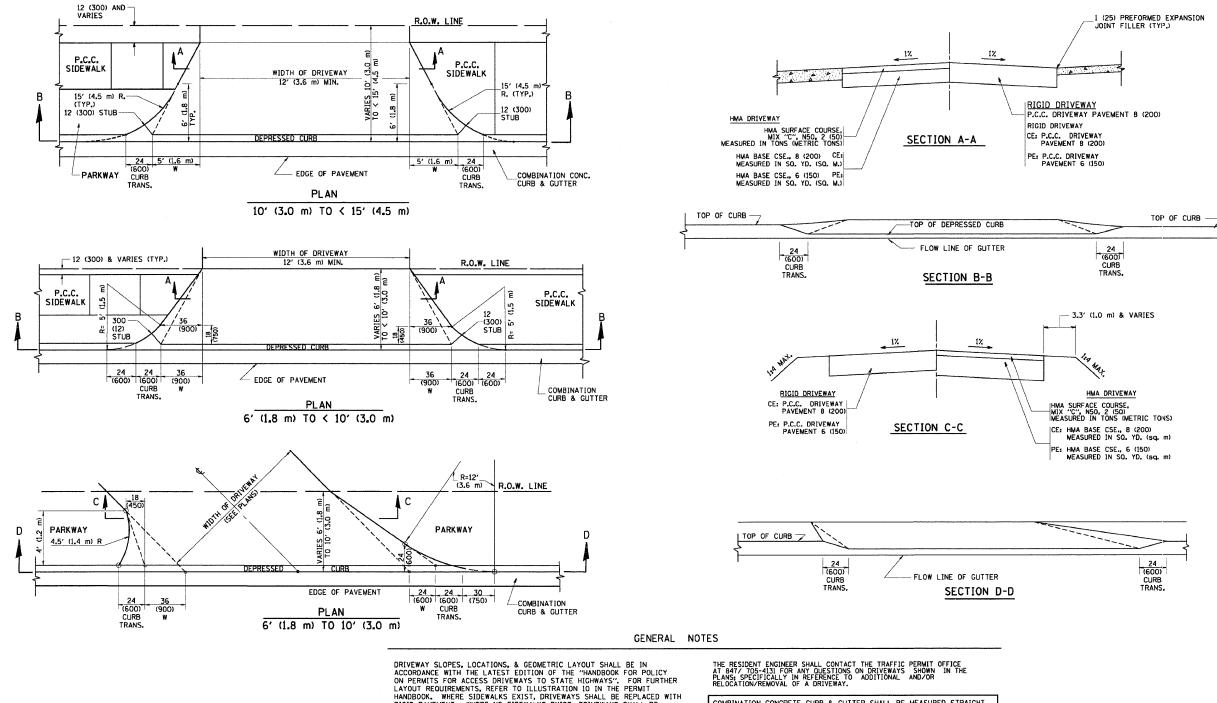
COMBINATION CONCRETE CURB & GUTTER SHALL BE MEASURED STRAIGHT ACROSS THE DRIVEWAY. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR THE CURB & GUTTER TRANSITION.

1 (25) PREFORMED EXPANSION JOINT FILLER WILL NOT BE PAID SEPARATELY, BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF THE P.C.C. SIDEWALK.

WHEN THE P.C.C. SIDEWALK EXTENDS THROUGH THE DRIVEWAY, THE THICKNESS OF THE SIDEWALK IN THE DRIVEWAY AREA SHALL BE THE SAME AS THE DRIVEWAY THICKNESS. SIDEWALK WILL BE PAID FOR AS P.C.C. SIDEWALK CROSS SLOPE THRU DRIVEWAY AREA TO BE A MAXIMUM OF 1:50.

# DRIVEWAY DETAILS - DISTANCE BETWEEN R.O.W. AND CURB OR EDGE GREATER THAN OR EQUAL TO 15'

							.,
FILE NAME =	USER NAME = \$USER\$	DESIGNED	REVISED		DISTRICT ONE DETAIL SHEETS	F.A.P. SECTION	COUNTY TOTAL SHEET NO.
*FILEL*		DRAWN	REVISED	STATE OF ILLINOIS	IL ROUTE 47 FROM IL ROUTE 176 TO IL ROUTE 120	326 105 RS-9	McHENRY 37 22
	PLOT SCALE = \$SCALE\$	CHECKED	REVISED -	DEPARTMENT OF TRANSPORTATION	IL ROUTE 47 FROM IL ROUTE 1/0 TO IL ROUTE 120	0-91-603-09	CONTRACT NO. 60H33
	PLOT DATE = \$DATE\$	DATE - 4/2009	REVISED -	SC	SCALE: NONE SHEET NO. 22 OF 37 SHEETS STA. 8+85 TO STA. 256+29	FED. ROAD DIST. NO ILLINOIS FED.	AID PROJECT



DRIVEWAY SLOPES, LOCATIONS, & GEOMETRIC LAYOUT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "HANDBOOK FOR POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS". FOR FURTHER LAYOUT REQUIREMENTS, REFER TO ILLUSTRATION 10 IN THE PERMIT HANDBOOK. WHERE SIDEWALKS EXIST, DRIVEWAYS SHALL BE REPLACED WITH RIGID PAVEMENT. WHERE NO SIDEWALKS EXIST, DRIVEWAYS SHALL BE REPLACED IN KIND. SIDEWALK CROSS SLOPE THRU DRIVEWAY AREA TO BE A MAXIMUM OF 1:50.

WHEN THE DISTANCE BETWEEN R.O.W. AND THE BACK OF CURB IS EQUAL TO OR LESS THAN 8 (2.4 m), THE P.C.C. SIDEWALK SHALL EXTEND TO THE BACK OF CURB.

COMBINATION CONCRETE CURB & CUTTER SHALL BE MEASURED STRAIGHT ACROSS THE DRIVEWAY. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR THE CURB & CUTTER TRANSITION.

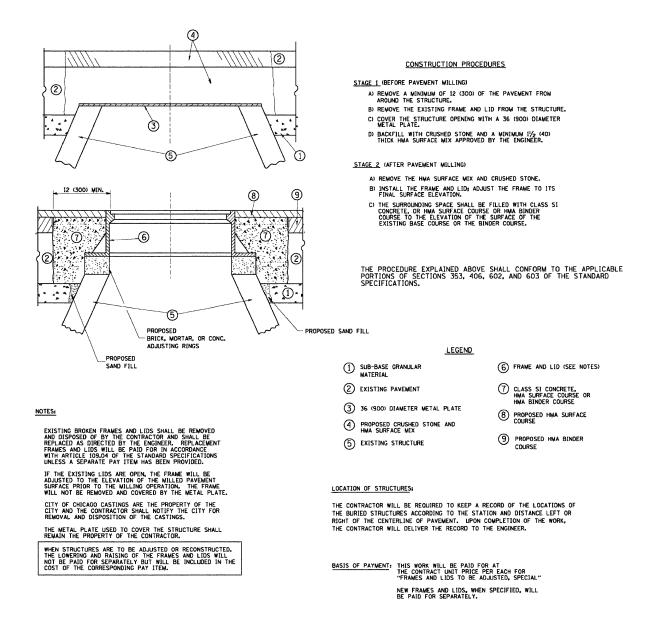
THE 1 (25) PREFORMED EXPANSION JOINT FILLER WILL NOT BE PAID SEPARATELY, BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF THE P.C.C. DRIVEWAY PAVEMENT OR P.C.C. SIDEWALK.

"W" VARIES FROM 36 (900) TO 5' (1.5 m) PROPORTIONAL TO THE LENGTH (L), FROM 6' (1.8 m) TO 10' (3 m).

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE NOTED.

# DRIVEWAY DETAILS - DISTANCE BETWEEN R.O.W. AND FACE OF CURB IS LESS THAN 15'

FILE NAME =	USER NAME = \$USER\$	DESIGNED -	REVISED -		DISTRICT ONE DETAIL SHEETS	F.A.P. SECTION	COUNTY TOTAL SHEET NO.
\$FILEL\$		DRAWN	REVISED	STATE OF ILLINOIS	IL ROUTE 47 FROM IL ROUTE 176 TO IL ROUTE 120	326 105 RS-9	McHENRY 37 23
	PLOT SCALE = \$SCALE\$	CHECKED	REVISED	DEPARTMENT OF TRANSPORTATION	IL NUUTE 4/ FRUINI IL NUUTE 1/0 TU IL NUUTE 120	D-91-603-09	CONTRACT NO. 60H33
	PLOT DATE = \$DATE\$	DATE - 4/2009	REVISED		SCALE: NONE SHEET NO. 23 OF 37 SHEETS STA. 8+85 TO STA. 256+29	FED. ROAD DIST. NO ILLINOIS FED.	AID PROJECT

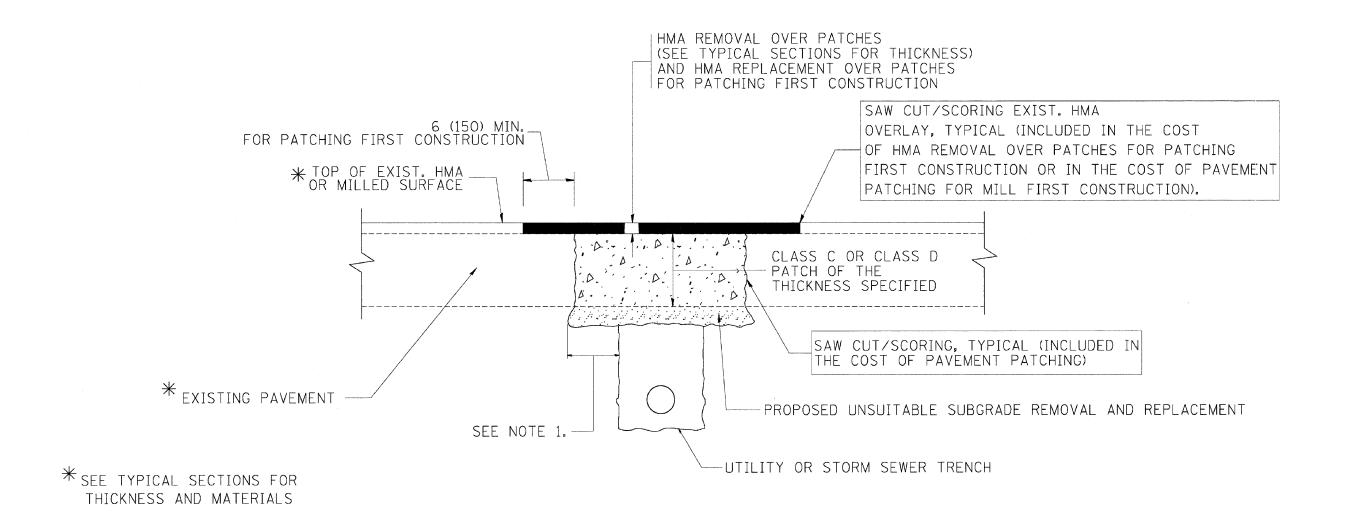


DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLES

# FRAMS AND LIDS ADJUSTMENT WITH MILLING; AND FRAMES AND LIDS ADJUSTMENT WITHOUT MILLING

FILE NAME =	USER NAME = \$USER\$	DESIGNED	REVISED -		DISTRICT ONE DETAIL SHEETS	F.A.P. SECTION	COUNTY TOTAL SHEET
\$FILEL\$		DRAWN	REVISED	STATE OF ILLINOIS	IL ROUTE 47 FROM IL ROUTE 176 TO IL ROUTE 120	326 105 RS-9	McHENRY 37 24
	PLOT SCALE = \$SCALE\$	CHECKED	REVISED	DEPARTMENT OF TRANSPORTATION	IL NUUTE 47 FRUIVI IL NUUTE 170 TU IL NUUTE 120	D-91-603-09	CONTRACT NO. 60H33
	PLOT DATE = \$DATE\$	DATE - 4/2009	REVISED		SCALE: NONE SHEET NO. 24 OF 37 SHEETS STA. 8+85 TO STA. 256+29	FED. ROAD DIST. NO ILLINOIS FED. A	ID PROJECT



#### NOTES:

- 1. THE WIDTH OF THE FULL DEPTH PATCH OVER A TRENCH SHALL BE 12 (300) WIDER ON EACH SIDE OF THE TRENCH.
- 2. FOR METHOD OF MEASUREMENT AND BASIS OF PAYMENT, SEE RECURRING SPECIAL PROVISION "PATCHING WITH HOT-MIX ASPHALT OVERLAY REMOVAL".

#### SEQUENCE OF CONSTRUCTION (PATCHING FIRST)

- 1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
- 2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
- 3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

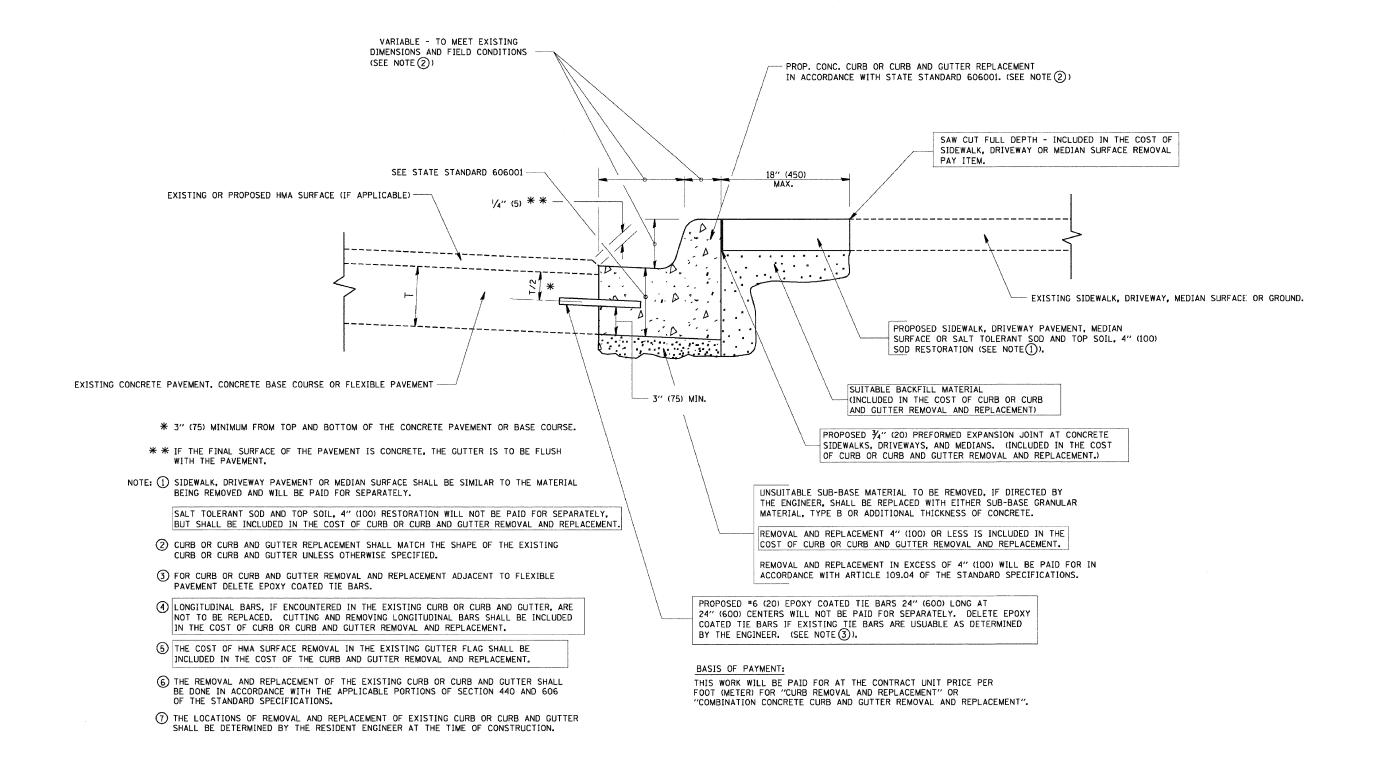
#### SEQUENCE OF CONSTRUCTION (MILLING FIRST)

- 1. MILL HMA FIRST IF THERE IS AT LEAST 41/2 INCHES OR MORE OF HMA MATERIAL ON TOP OF THE EXISTING PAVEMENT OR IF THE PAVEMENT IS FULL DEPTH HMA. A MINIMUM OF 2 INCHES OF HMA MATERIAL SHALL BE IN PLACE AFTER MILLING.
- 2. REMOVE AND REPLACE WITH FULL DEPTH CLASS D PATCHES TO TOP OF MILLED SURFACE.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS

# PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT

FILE NAME =	USER NAME = \$USER\$	DESIGNED	REVISED		DISTRICT ONE DETAIL SHEETS	F.A.P. SECTION	COUNTY TOTAL SHEE
\$FILEL\$		DRAWN	REVISED -	STATE OF ILLINOIS		326 105 RS-9	MCHENRY 37 25
	PLOT SCALE = \$SCALE\$	CHECKED	REVISED	DEPARTMENT OF TRANSPORTATION	IL ROUTE 47 FROM IL ROUTE 176 TO IL ROUTE 120	D-91-603-09	CONTRACT NO. 60H3
	PLOT DATE = \$DATE\$	DATE - 4/2009	REVISED	SC	SCALE: NONE SHEET NO. 25 OF 37 SHEETS STA. 8+85 TO STA. 256+29	FED. ROAD DIST. NO   ILLINOIS FED.	AID PROJECT

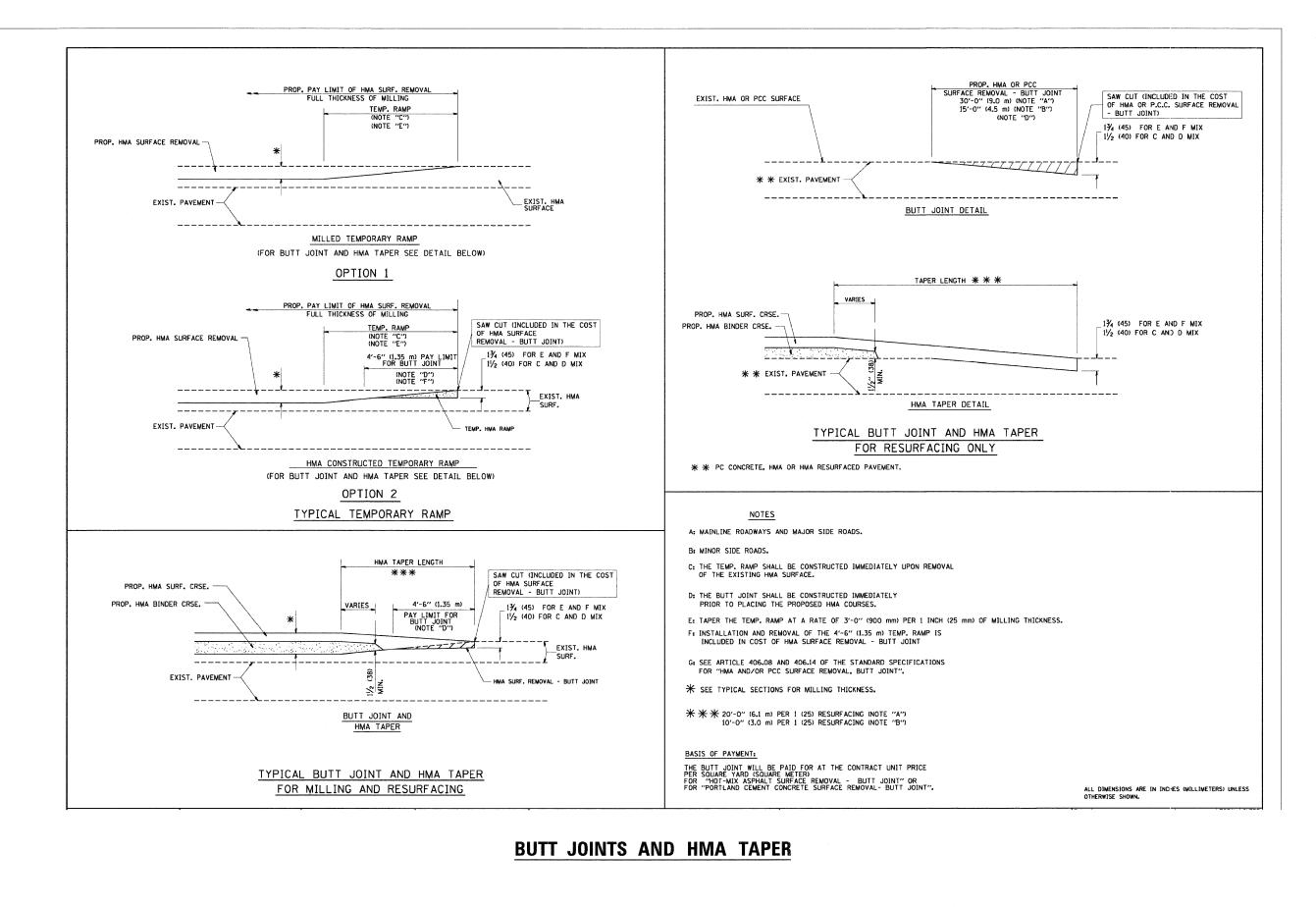


# CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN,

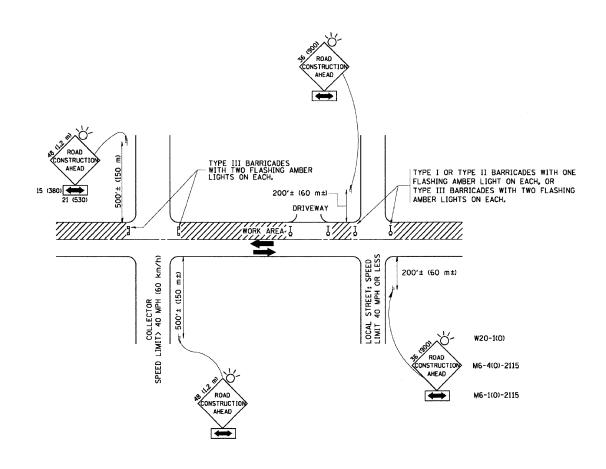
# **CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT**

FILE NAME =	USER NAME = \$USER\$	DESIGNED	REVISED -		DISTRICT ONE DETAIL SHEETS	F.A.P. SECTION	COUNTY TOTAL SHEE SHEETS NO.
\$FILEL\$		DRAWN	REVISED	STATE OF ILLINOIS	IL ROUTE 47 FROM IL ROUTE 176 TO IL ROUTE 120	326 105 RS-9	MCHENRY 37 26
	PLOT SCALE = \$SCALE\$	CHECKED	REVISED	DEPARTMENT OF TRANSPORTATION	IL ROUTE 47 FROWL IL ROUTE 170 TO IL ROUTE 120	D-91-603-09	CONTRACT NO. 60H33
	PLOT DATE : \$DATES	DATE - 4/2009	REVISED	Science	SCALE: NONE SHEET NO. 26 OF 37 SHEETS STA. 8+85 TO STA. 256+29		AID PROJECT



NAME =	USER NAME = \$USER\$	DESIGNED	REVISED -	07475 05 444040		DISTRICT ONE DETAIL SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
L\$		DRAWN	REVISED -	STATE OF ILLINOIS	IL ROUTE 47 FROM IL ROUTE 176 TO IL ROUTE 120		326	105 RS-9	McHENRY	37	27
	PLOT SCALE = \$SCALE\$	CHECKED	REVISED	DEPARTMENT OF TRANSPORTATION	IL RUUTE 47 FRUIVI IL RUUTE 1/6 TU IL RUUTE 120			0-91-603-09	CONTRACT	T NO. 6	60H33
	PLOT DATE = \$DATE\$	DATE - 4/2009	REVISED -		SCALE: NONE	SHEET NO. 27 OF 37 SHEETS STA. 8+85 TO STA, 256+29	FED. ROAD D	DIST. NO   ILLINOIS FED. A	ID PROJECT		

FILE NAME \$FILEL\$



TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

#### NOTES:

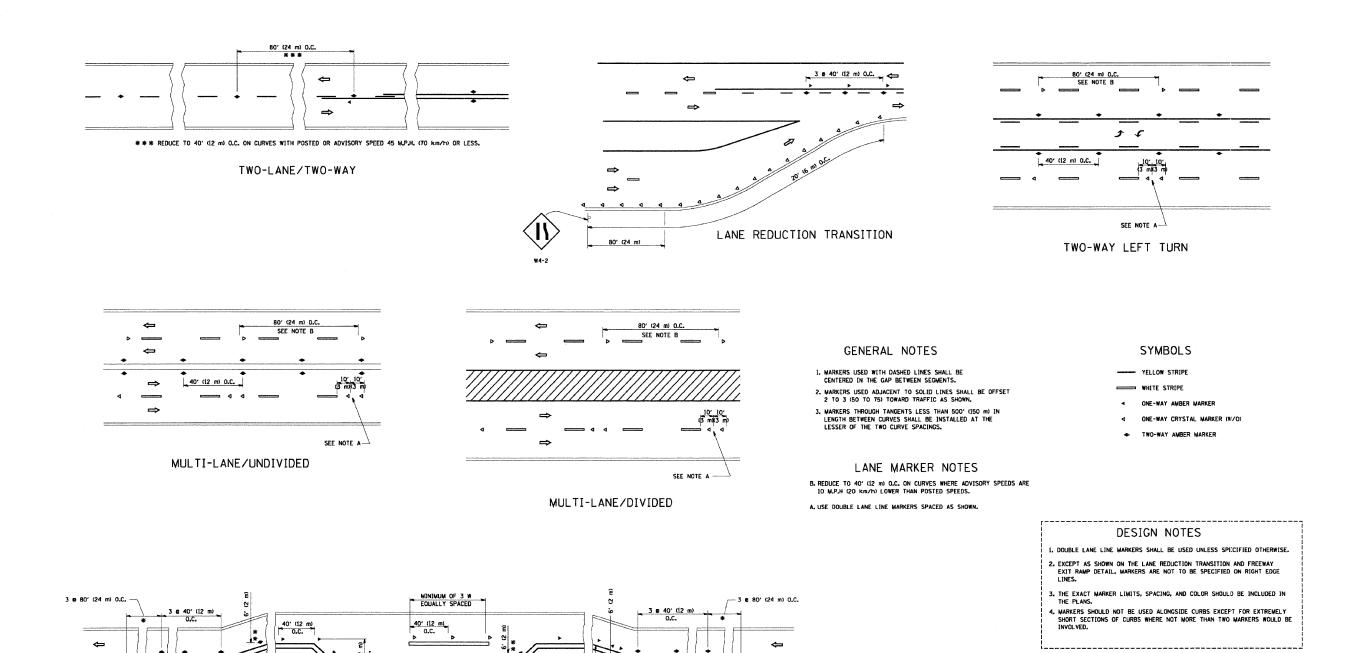
- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS
- 1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- Q) ONE ROAD CONSTRUCTION AHEAD SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
- b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE 1, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
- 2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- O) ONE ROAD CONSTRUCTION AHEAD SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
- b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY
  BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION
  OF THE CLOSED PORTION.
- 3. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (MG-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (MG-4).

- B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:
- USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701506 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.
- C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.
- D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

All dimensions are in millimeters (inches) unless otherwise shown.

# TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS AND DRIVEWAYS

FILE NAME =	USER NAME = SUSERS	DESIGNED	REVISED		II DOUTE AT EDOM II DOUTE 176 TO II DOUTE 120		F.A.P. SECTION	COUNTY TOTAL SHEET
\$F!LEL\$		DRAWN	REVISED	STATE OF ILLINOIS			326 105 RS-	MCHENRY 37 28
	PLDT SCALE = \$SCALE\$	CHECKED	REVISED	DEPARTMENT OF TRANSPORTATION	11	L KOUTE 47 FROM IL KOUTE 1/6 TO IL KOUTE 120	D-91-603-09	CONTRACT NO. 60H33
	PLOT DATE = \$DATE\$	DATE - 4/2009	REVISED		SCALE: NONE	SHEET NO. 28 OF 37 SHEETS STA. 8+85 TO STA. 256+29	FED. ROAD DIST. NO ILLI	NOIS FED. AID PROJECT



All dimensions are in inches (millimeters) unless otherwise shown.

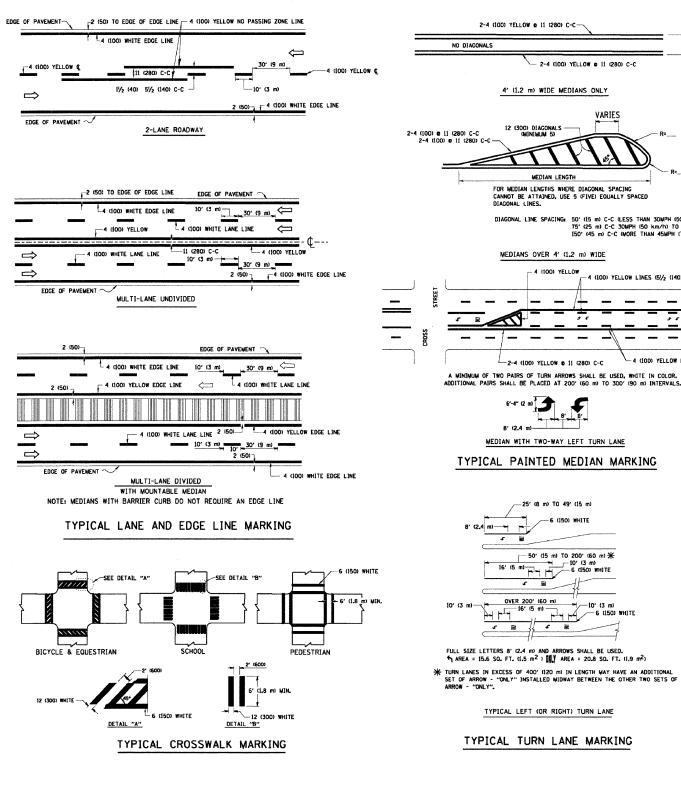
# RAISED REFLECTIVE PAVEMENT MARKERS (SNOW PLOW RESISTANT)

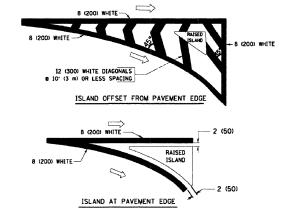
FILE NAME =	USER NAME = \$USER\$	DESIGNED	REVISED		DISTRICT ONE DETAIL SHEETS IL ROUTE 47 FROM IL ROUTE 176 TO IL ROUTE 120  SCALE: NONE SHEET NO. 29 OF 37 SHEETS STA. 8+85 TO STA. 256+29		I SHFFTS	F.A.P. RTF.	SECTION	COUNTY	TOTAL SHEET
\$FILEL\$		DRAWN	REVISED	STATE OF ILLINOIS				326	105 RS-9	McHENRY	37 29
	PLOT SCALE = \$SCALE\$	CHECKED	REVISED	DEPARTMENT OF TRANSPORTATION			70 IU IL NUUIE IZU	Ci Ci	-91-603-09	CONTRACT	T NO. 60H33
	PLOT DATE = \$DATE\$	DATE - 4/2009	REVISED				STA. 8+85 TO STA. 256+29	FED. ROAD DIST. NO ILLINOIS FED. AID PRO		. AID PROJECT	

\* SEE TWO-LANE/TWO-WAY WHERE MARKERS CONTINUE

\*\* WHERE THE MEDIAN WIDTH IS 6' (2 m) OR LESS
USE TWO-WAY MARKERS.

LEFT TURN





#### TYPICAL ISLAND MARKING

	TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REWARKS
ELLOW LINES (51/2 (140) C-C)	CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
	CENTERLINE ON MULTI-LANE UNDIVEDED PAVEMENT	2 e 4 (100)	SOLID	YELLOW	11 (280) C-C
	NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 0 4 (100)	SOLID SOLID	AETTOM AETTOM	5½ (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
	LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SFACE
4 (100) YELLOW LINES (51/2 (140) C-C)	DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
ED, WHITE IN COLOR. CO' (90 m) INTERVALS.	EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW: EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
	TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE WARKING DETAIL
.NE	TWO WAY LEFT TURN MARKING	2 0 4 (100) EACH DIRECTION	SKIP-DASH AND SOLID	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 51/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE
 IARKING		8' (2.4m) LEFT ARROW	IN PAIRS	WHITE	SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
HINTHO	CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 8 6 (150) 12 (300) 8 45" 12 (300) 8 90"	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
	STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSMALK, IF PRESENT, OTHERMISE, PLACE AT DESIRED STOPPING POINT: PARALLEL TO CROSSROAD CENTERLINE, SHERE POSSIBLE
	PAINTED MEDIANS	2 & 4 (100) WITH 12 (300) DIAGONALS & 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	II (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
	CORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS # 45°	50LID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (OVER 45MPH (70 km/h))
WHITE	RAILROAD CROSSING	24 (600) TRANSVERSE LINES: "RR" IS 6' (1.8 m: LETTERS: 16 (400) LINE FOR "X"	SOLID	WH!TE	SEE STATE STANDARD 780001 AREA 0F: "R"=3.6 50. FT. (0.33 m²) EACH "X"=54,0 50. FT. (5.0 m²)
	SHOULDER DIAGONALS	12 (300) e 45°	SOLID		50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

# **DISTRICT ONE TYPICAL PAVEMENT MARKINGS**

2-4 (100) YELLOW & 11 (280) C-C-

- 2-4 (100) YELLOW @ 11 (280) C-C

4' (1.2 m) WIDE MEDIANS ONLY

FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.

MEDIANS OVER 4' (1.2 m) WIDE

-2-4 (100) YELLOW @ 11 (280) C-C

MEDIAN WITH TWO-WAY LEFT TURN LANE TYPICAL PAINTED MEDIAN MARKING

6'-4" (2 m) 8' 8' 8'

FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.  $\P$  AREA = 15.6 SO. FT. (1.5 m<sup>2</sup>)  $\P$  AREA = 20.8 SO. FT. (1.9 m<sup>2</sup>)

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING

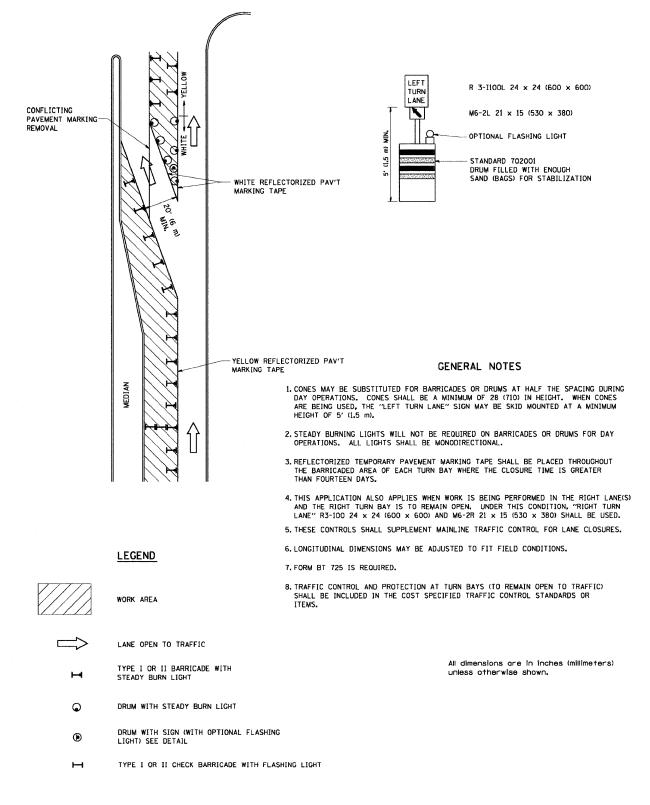
A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.

DIAGONAL LINE SPACING: 50° (15 m) C-C (LESS THAN 30MPH (50 km/h))
75° (25 m) C-C 30MPH (50 km/h) TO 45MPH (170 km/h))
150° (45 m) C-C (MORE THAN 45MPH (70 km/h))

4 (100) YELLOW LINES (51/2 (140) C-C)

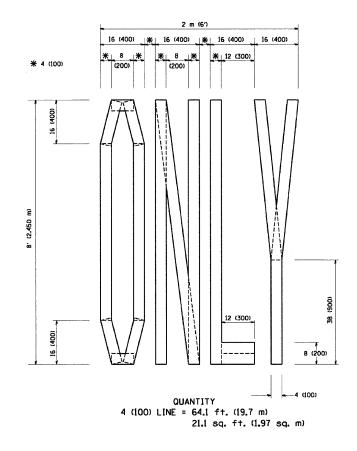
4' (1.2 m) OUTSIDE TO OUTSIDE OF LINES

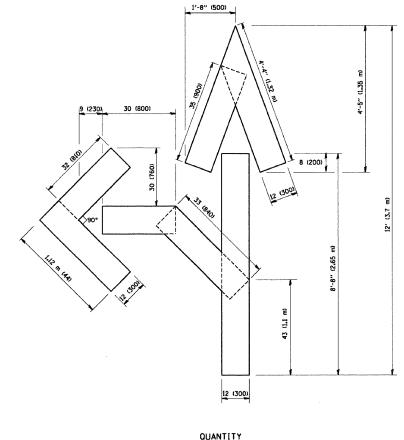
FILE NAME =	USER NAME = \$USER\$	DESIGNED -	REVISED -			DISTRICT ONE DETA	IL SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEET NO.
\$FILEL\$		DRAWN	REVISED -	STATE OF ILLINOIS	IL ROUTE 47 FROM IL ROUTE 176 TO IL ROUTE 120		326	105 RS-9	McHENRY	37 30	
	PLOT SCALE = \$SCALE\$	CHECKED	REVISED -	DEPARTMENT OF TRANSPORTATION	IL	IL ROUTE 47 FROM IL ROUTE 1/6 TO IL ROUTE 120		D.	-91-603-09	CONTRACT	NO. 60H33
	PLOT DATE = \$DATE\$	DATE - 4/2009	REVISED		SCALE: NONE SHEET NO. 30 OF 37 SHEETS STA. 8+85 TO STA. 256+29		STA. 8+85 TO STA. 256+29	FED. ROAD DI	ST. NO   ILLINOIS FED.	AID PROJECT	

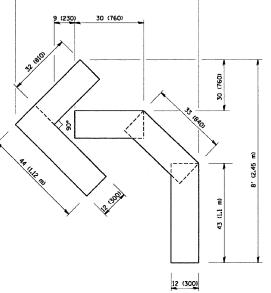


# TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC)

FILE NAME =	USER NAME = &USER\$	DESIGNED	REVISED		DISTRICT ONE DETAIL SHEETS	F.A.P. SECTION	COUNTY TOTAL SHEET SHEET NO.
\$FILEL\$		DRAWN	REVISED -	STATE OF ILLINOIS	IL ROUTE 47 FROM IL ROUTE 176 TO IL ROUTE 120	326 105 RS-9	McHENRY 37 31
	PLOT SCALE = \$SCALE\$	CHECKED	REVISED	DEPARTMENT OF TRANSPORTATION	IL NUUTE 47 FNUIVI IL NUUTE 170 TU IL NUUTE 120	D-91-603-09	CONTRACT NO. 60H33
	PLOT DATE = \$DATE\$	DATE - 4/2009	REVISED		SCALE: NONE SHEET NO. 31 OF 37 SHEETS STA. 8+85 TO STA. 256+29	FED. ROAD DIST. NO ILLINOIS FED. A	AID PROJECT







6'-8" (2.030 m)

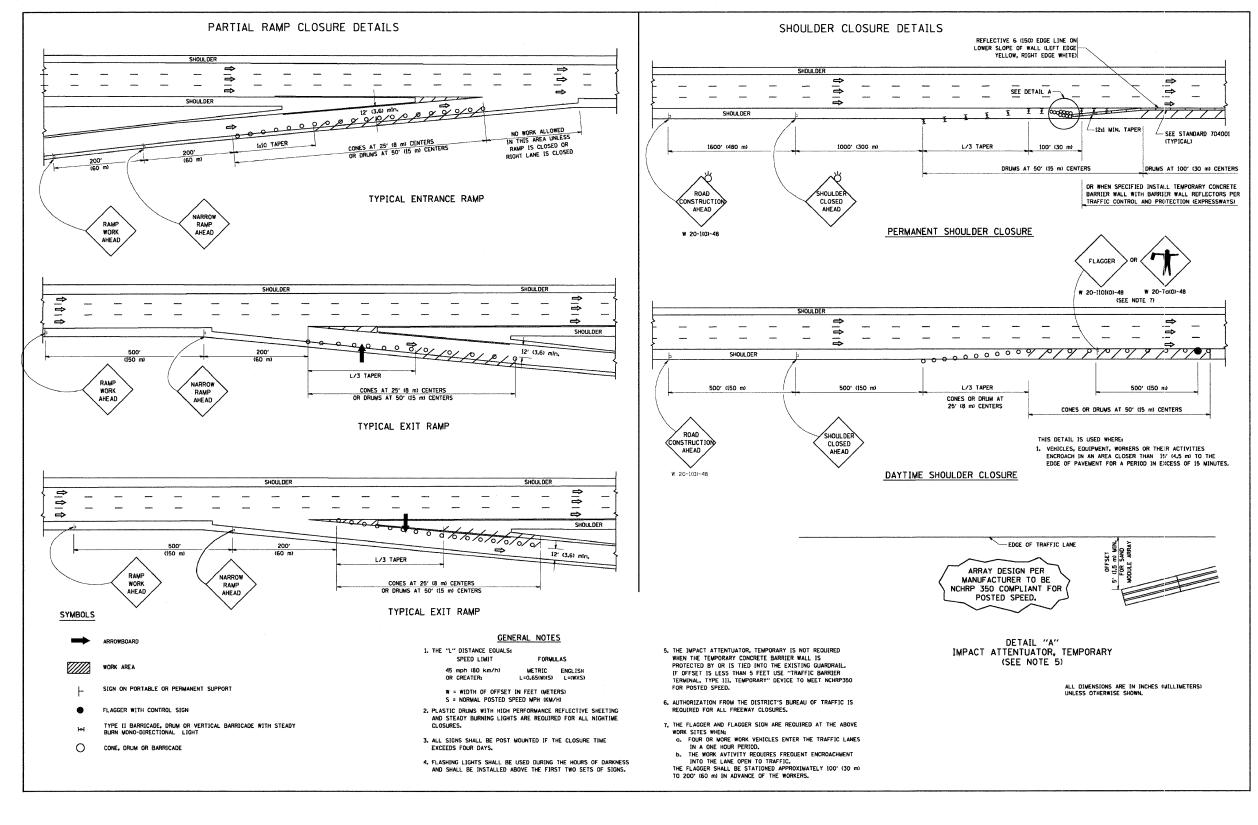
OUANTITY 4 (100) LINE = 82.5 ft. (25.3 m) 27.5 sq. ft. (2.53 sq. m)

All dimensions are in inches (millimeters) unless otherwise shown.

# PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING

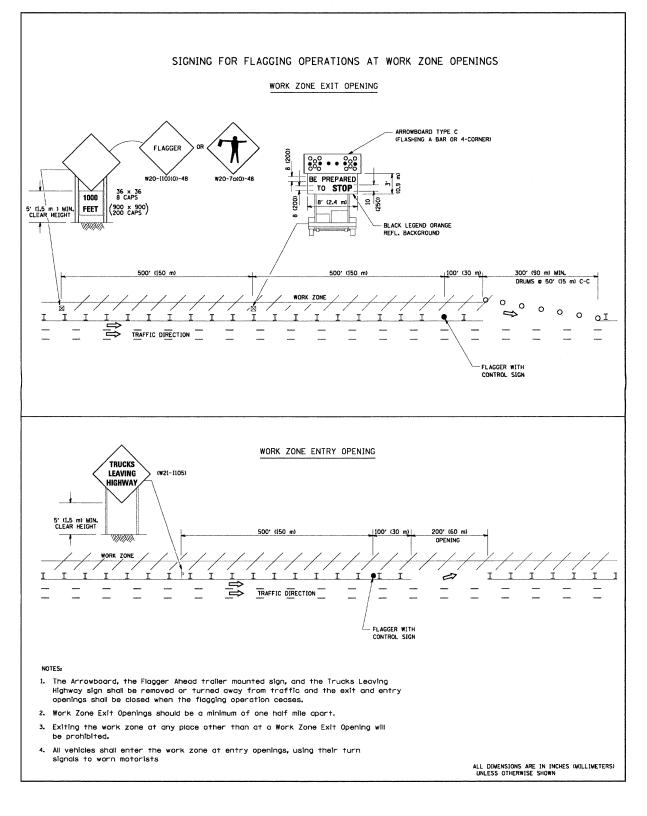
OUANTITY 4 (100) LINE = 45.5 ft. (13.9 m) 15.2 sq. ft. (1.39 sq. m)

FILE NAME =	USER NAME = \$USER\$	DESIGNED	REVISED ~		DISTRICT ONE DETAIL SHEETS	F.A.P. SECTION	COUNTY TOTAL SHEET NO.
\$FILEL\$		DRAWN	REVISED	STATE OF ILLINOIS	IL ROUTE 47 FROM IL ROUTE 176 TO IL ROUTE 120	326 105 RS-9	McHENRY 37 32
	PLOT SCALE = \$SCALE\$	CHECKED	REVISED	DEPARTMENT OF TRANSPORTATION	IL NOUTE 47 I NOW! IL NOUTE 170 TO TE NOUTE 120	D-91-603-09	CONTRACT NO. 60H33
	PLOT DATE = \$DATE\$	DATE - 4/2009	REVISED		SCALE: NONE SHEET NO. 32 OF 37 SHEETS STA. 8+85 TO STA. 256+29	FED. ROAD DIST. NO ILLINOIS FED. A	AID PROJECT



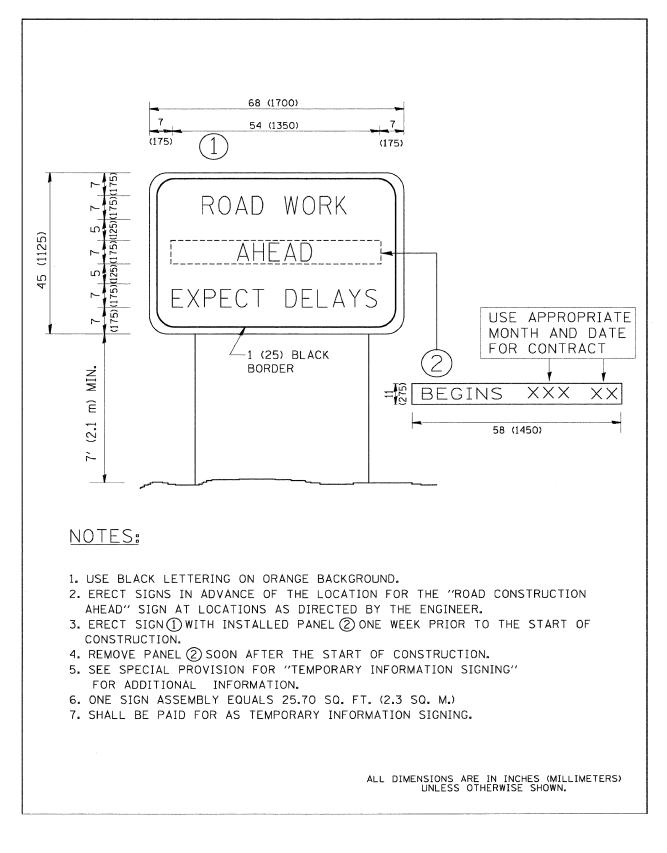
# TRAFFIC CONTROL FOR SHOULDER CLOSURES AND PARTIAL RAMP CLOSURES

FILE NAME =	USER NAME = SUSERS	DESIGNED	REVISED		DISTRICT ONE DETAIL SHEETS	F.A.P. SECTION	COUNTY TOTAL SHEET SHEETS NO.
\$FILEL\$		DRAWN	REVISED -	STATE OF ILLINOIS	IL ROUTE 47 FROM IL ROUTE 176 TO IL ROUTE 120	326 105 RS-9	McHENRY 37 33
	PLOT SCALE = SSCALES	CHECKED	REVISED	DEPARTMENT OF TRANSPORTATION	IL NOOTE 47 FROM IL NOOTE 170 TO IL NOOTE 120	D-91-603-09	CONTRACT NO. 60H33
	PLOT DATE = \$DATE\$	DATE - 4/2009	REVISED		SCALE: NONE SHEET NO. 33 OF 37 SHEETS STA. 8+85 TO STA. 256+29	FED. ROAD DIST. NO ILLINOIS FED.	AID PROJECT



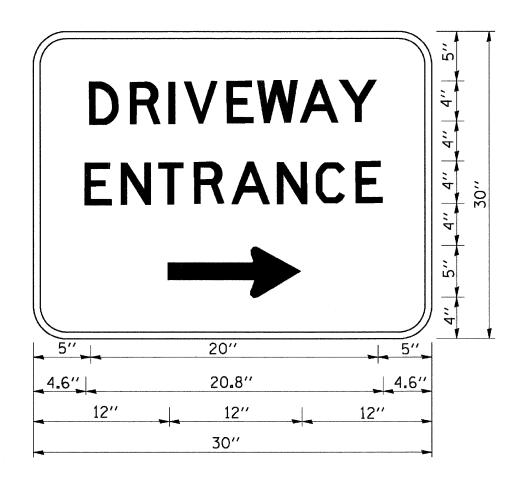
# SIGNING FOR FLAGGING OPERATIONS AT WORK ZONE OPENINGS

FILE NAME =	USER NAME = SUSERS	DESIGNED	REVISED		DISTRICT ONE DETAIL SHEETS	F.A.P. SECTION	COUNTY TOTAL SHEET NO.
\$FILEL\$		DRAWN	REVISED -	STATE OF ILLINOIS	IL ROUTE 47 FROM IL ROUTE 176 TO IL ROUTE 120	326 105 RS-9	McHENRY 37 34
	PLOT SCALE = \$SCALE\$	CHECKED	REVISED -	DEPARTMENT OF TRANSPORTATION	IL NOOTE 47 FROW! IL ROOTE 170 TO IL ROOTE 120	D-91-603-09	CONTRACT NO. 60H33
	PLOT DATE = \$DATE\$	DATE - 4/2009	REVISED		SCALE: NONE SHEET NO. 34 OF 37 SHEETS STA. 8+85 TO STA. 256+29	FED. ROAD DIST. NO ILLINOIS FED. A	ID PROJECT



# ARTERIAL ROAD SIGN INFORMATION

FILE NAME =	USER NAME = \$USER\$	DESIGNED	REVISED -		DISTRICT ONE DETAIL SHEETS	F.A.P. SECTION	COUNTY TOTAL SHEET NO.
\$FILEL\$		DRAWN	REVISED	STATE OF ILLINOIS	IL ROUTE 47 FROM IL ROUTE 176 TO IL ROUTE 120	326 105 RS-9	MCHENRY 37 35
	PLOT SCALE = \$SCALE\$	CHECKED	REVISED	DEPARTMENT OF TRANSPORTATION	IL ROUTE 47 FROWL IL ROUTE 170 TO IL ROUTE 120	1)-91-603-09	CONTRACT NO. 60H33
	PLOT DATE = SDATES	DATE - 4/2009	REVISED		SCALE: NONE SHEET NO. 35 OF 37 SHEETS STA. 8+85 TO STA. 256+29	FED. ROAD DIST. NO ILLINOIS FED.	AID PROJECT



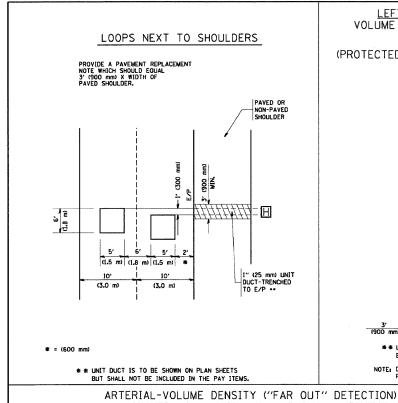
3.0" RADIUS, 0.5" BORDER, WHITE ON GREEN; REFLECTORIZED "DRIVEWAY" D; "ENTRANCE" D; STANDARD ARROW CUSTOM 12.0" × 5.0"

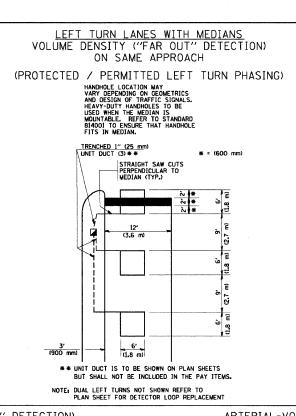
## NOTES:

- 1. HALF OF THE SIGNS WILL REQUIRE A LEFT HAND FACING ARROW.
- 2. TWO SIGNS SHALL BE USED AT EACH COMMERCIAL ENTRANCE PLACED BACK-TO-BACK: ONE WITH A RIGHT HAND ARROW (SHOWN) SHALL BE PLACED ON THE NEAR RIGHT SIDE THE DRIVEWAY AND ONE WITH A LEFT HAND ARROW SHALL BE PLACED ON THE FAR LEFT SIDE OF THE DRIVEWAY.
- 3. SIGNS TO BE PAID FOR AS ITEM "TEMPORARY INFORMATION SIGNING".

# **DRIVEWAY ENTRANCE SIGNING**

FILE NAME =	USER NAME = \$USER\$	DESIGNED	REVISED -			DISTRICT ONE DETA	IL SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEET SHEETS NO.
\$FILEL\$		DRAWN	REVISED -	STATE OF ILLINOIS	IL ROUTE 47 FROM IL ROUTE 176 TO IL ROUTE 120  SCALE: NONE		326	105 RS-9	MCHENRY	37 36	
	PLOT SCALE = \$SCALE\$  PLOT DATE = \$DATES	DATE - 4/2009	REVISED	DEPARTMENT OF TRANSPORTATION			FED. ROAD	D-91-603-09 DIST. NO.	CONTRACT D. AID PROJECT	T NO. 60H33	





VOLUME DENSITY ("FAR OUT" DETECTION)

ON SAME APPROACH

(PROTECTED / PERMITTED LEFT TURN PHASING)

\* = (600 mm)

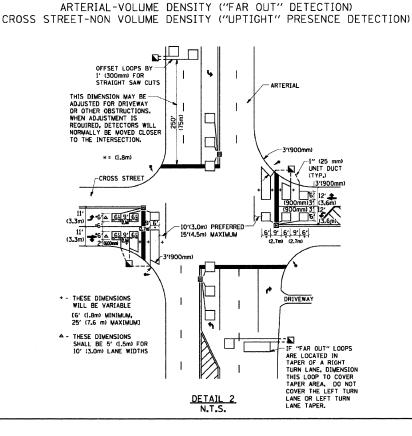
\* = (600 mm)

\* = (600 mm)

\* = (600 mm)

STRAIGHT SAW CUT TO HEAVY DUTY HANDHOLE BETWEEN FIRST AND SECOND LOOP AS SHOWN.

CROSS STREET-VOLUME DENSITY ("FAR OUT" DETECTION) ARTERIAL CALLING LOOP IN RIGHT TURN LANE. CROSS STREET [TYP.-12' (3.6m) LANES] 12' 12' 12' 12' 12' 3.6m) (3.6m) [TYP.-ALL LEGS-VOLUME ("FAR OUT" DETECTION)] DUCT IS RUN BETWEEN EDGE OF PAVEMENT STRAIGHT SAW CUTS TO HEAVY-DUTY HANDHOLE-DRIVEWAY AND HANDHOLE. OFF SET LOOPS BY IN PAVEMENT THAT TERMINATE IN HANDHOLES STRAIGHT SAW CUTS. OUTSIDE PAVEMENT) (io)\*



#### NOTES:

#### VEHICLES LOOP DETECTORS

- \* ALL LEAD IN CABLE SHALL BE TWO CONDUCTOR NO. 14 TWISTED. SHIELDED.
- \* EACH DETECTOR LOOP SHALL HAVE ITS OWN SAW CUT FROM THE LOOP TO THE EDGE OF PAVEMENT OR TO A HANDHOLE IN THE PAVEMENT.
- \* EACH DETECTOR LOOP SHALL HAVE ITS OWN ONE INCH (25 mm) UNIT DUCT BETWEEN THE EDGE OF PAVEMENT AND THE FIRST HANDHOLE OR JUNCTION BOX. EACH UNIT DUCT RUN SHALL BE SHOWN ON THE PLANS BY THE DESIGNER, BUT SHALL NOT BE PAID FOR SEPARATLY. THIS ITEM IS INCIDENTAL TO THE PAY ITEM FOR DETECTOR LOOPS.
- \* ONE DIMENSION OF <u>ALL</u> DETECTOR LOOPS SHALL BE SIX FEET (1.8 m)
- \* EACH LANE OF NON-LOCKING, PRESENCE DETECTION AND EACH LANE OF A DOUBLE LEFT TURN LANE REQUIRES A SEPARATE INDUCTIVE LOOP DETECTOR AND LEAD IN CABLE.
- \* WHEN NON-LOCKING, PRESENCE DETECTION IS USED, MORE
  THAN ONE LOOP PER LANE IS REQUIRED BEHIND THE STOP BAR
  (i.e. 1-1/2, 1-3/4, 2).
- \* WHEN SYSTEM LOOPS ARE REQUIRED ON AN APPROACH OF AN INTERSECTION, THE LOOPS USED FOR VOLUME DENSITY AND INTERSECTION TIMING SHALL ALSO BE USED AS SYSTEM DETECTORS. EACH ONE OF THESE TYPE OF LOOPS REQUIRES A SEPARATE TWO CONDUCTOR NO. 14 TWISTED SHIELDED CABLE AND A SEPARATE INDUCTIVE LOOP DETECTOR WHEN NEW CONTROLLERS ARE UTILIZED. THE DESIGNER SHALL LABEL THESE TYPES OF LOOPS AS "INTERSECTION AND SAMPLING (SYSTEM) DETECTORS" ON THE SIGNAL LAYOUT, THE INTERCONNECT PLAN AND THE SYSTEM CABLE PLAN. WHEN AN EXISTING CONTROLLER IS UTILIZED FOR THIS TYPE OF DETECTION, THE PAY ITEM "INDUCTIVE LOOP DETECTOR WITH SYSTEM OUTPUT" SHOULD BE USED.

#### PLACEMENT OF DETECTORS

THE FOLLOWING FIGURES REPRESENT THE MOST COMMON DETECTOR LOOP LOCATIONS AND SIZES. ADJUSTMENTS WILL BE NECESSARY FOR SPECIFIC GEOMETRIC CONSIDERATIONS.

LOCATIONS AND DEMENSIONS OF DETECTOR LOOPS ARE REQUIRED ON  $\underline{\mathsf{ALL}}$  SIGNAL LAYOUT PLAN SHEETS.

"FAR OUT" DETECTION REFERS TO LOCKING, PRESENCE TYPE DETECTION LOCATED IN THRU LANES, RIGHT TURN LANES, AND RIGHT TURN LANE TAPER AREAS (IF APPLICABLE), USUALLY 250' (75 m) IN ADVANCE OF STOP BARS. "UPTIGHT" DETECTION REFERS TO NON-LOCKING PRESENCE TYPE DETECTION LOCATED IN ALL LANES AND 10'-15' (3.0 m-4.5 m) BEHIND THE CROSSING STREET'S EDGE OF PAVEMENT EXTENDED.

#### NOTE:

ALL DETAILS AND NOTES SHOWN ARE FROM THE I.D.O.T. DISTRICT 1
TRAFFIC SIGNAL DESIGN GUIDELINES DATED JANUARY 1995

THIS DRAWING HAS BEEN PREPARED TO ASSIST THE RESIDENT ENGINEER FOR ALL ROADWAY RESURFACING OR S.M.A.R.T. PROJECTS WHERE THE DIMENSIONS ARE NOT SHOWN ON THE PLANS AND THE FINAL LOCATIONS FOR CROSSWALKS OR STOP BARS ARE NOT DETERMINED.

# DETECTOR LOOP INSTALLATION DETAIL FOR ROADWAY RESURFACING

USER NAME = \$USER\$	DESIGNED -		REVISED	-	
	DRAWN -		REVISED	-	
PLOT SCALE = \$SCALE\$	CHECKED -		REVISED	-	 DI
PLOT DATE = \$DATE\$	DATE -	4/2009	REVISED	-	

FILE NAME

\$FILEL\$

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

	DISTRICT ONE DETAIL SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL	SHEE NO.
	ROUTE 47 FROM IL ROUTE 176 TO IL ROUTE 120	326	105 RS-9	MCHENRY	37	37
IL.	NOTE 47 FROM IL NOTE 170 TO IL NOTE 120		D-91-603-09	CONTRAC	T NO. 6	50H33
SCALE: NONE	SHEET NO. 37 OF 37 SHEETS STA. 8+85 TO STA. 256+29	FED. F	OAD DIST, NO ILLINOIS FED.	AID PROJECT		